

# B

GEARMOTORS

## CYCLO® GEARMOTORS

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# **B** CYCLO® GEARMOTORS

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## 1. HOW TO SELECT

# Standard Specifications of Gearmotor

## Motor

| Items                                       | Standard Specification                                                                                      |                                                |                                               | Standard Specification with Built-in Brake                                                                  |                                                |      |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------|------|
| Capacity Range                              | 0.1 - 55kW × 4P<br>15 - 55kW × 6P                                                                           |                                                |                                               | 0.1 - 30kW × 4P FB Brake (Non-Asbestors)<br>37kW × 4P ESB Brake<br>*For 6P motor with brake, consult us.    |                                                |      |
| Enclosure                                   | Totally enclosed fan cooled type (0.1kW × 4P totally enclosed non-ventilated)                               |                                                |                                               | Totally enclosed fan cooled type (0.1kW × 4P totally enclosed non-ventilated)                               |                                                |      |
| Power Source                                | 0.1 - 3.7kW:                                                                                                | 220 - 240V                                     | 50Hz                                          | 0.1 - 3.7kW:                                                                                                | 220 - 240V                                     | 50Hz |
|                                             |                                                                                                             | 220V                                           | 60Hz                                          |                                                                                                             | 220V                                           | 60Hz |
|                                             | 5.5 - 55kW:                                                                                                 | 380 - 420V                                     | 50Hz                                          | 5.5 - 37kW:                                                                                                 | 380 - 420V                                     | 50Hz |
|                                             |                                                                                                             | 380 - 420V                                     | 50Hz                                          |                                                                                                             | 380 - 420V                                     | 50Hz |
|                                             |                                                                                                             | 440V                                           | 60Hz                                          |                                                                                                             | 440V                                           | 60Hz |
| Thermal Class                               | F                                                                                                           |                                                |                                               | F                                                                                                           |                                                |      |
| Time Rating                                 | Continuous rating                                                                                           |                                                |                                               | Continuous rating                                                                                           |                                                |      |
| Terminal Box Position & Lead Wire Direction | On the left side viewed from the load side.<br>Regarding the draw out hole direction, refer to Table below. |                                                |                                               | On the left side viewed from the load side.<br>Regarding the draw out hole direction, refer to Table below. |                                                |      |
| Lead Wiring                                 | 6 Wires                                                                                                     | 4P                                             | 6P                                            | 8 Wires                                                                                                     | 4P                                             |      |
|                                             |                                                                                                             | 0.1~3.7kW<br>(Direct starting)                 | -                                             |                                                                                                             | 0.1~3.7kW<br>(Direct starting)                 |      |
|                                             |                                                                                                             | Note: 2 5.5~55kW<br>(λ - Δ starting available) | Note: 2 15~55kW<br>(λ - Δ starting available) |                                                                                                             | Note: 2 5.5~37kW<br>(λ - Δ starting available) |      |
| Standards                                   | Conforms to IEC.                                                                                            |                                                |                                               |                                                                                                             |                                                |      |

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How to  
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## Reducer

| Items                              | Specifications                                                         |                            |
|------------------------------------|------------------------------------------------------------------------|----------------------------|
| Model                              | CYCLO 6000 Series                                                      | CYCLO 6000SK Series        |
| Lubrication Method                 | Grease lubricated and oil lubricated models available                  |                            |
| Speed Reduction Method             | Internal planetary gear mechanism with trochoidal curved tooth profile |                            |
| Direction of Output Shaft Rotation | Single reduction                                                       | Counter-clockwise rotation |
|                                    | Double reduction                                                       | Clockwise rotation         |
|                                    | As observed from the load side when connected to R-U, S-V, T-W motors. |                            |

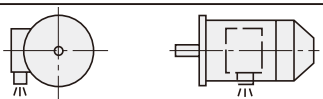
## Common to Motor and Reducer

| Items                                  | Specifications                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Installation location                  | Indoor or outdoor (Minimal dust and humidity)                                                                                                                                                                                                                                                                                                            |
| Ambient Temperature                    | -10°C ~ 40°C                                                                                                                                                                                                                                                                                                                                             |
| Ambient Humidity                       | Under 85%                                                                                                                                                                                                                                                                                                                                                |
| Elevation                              | Lower than 1,000 meters above sea level                                                                                                                                                                                                                                                                                                                  |
| Atmosphere                             | Well ventilated location, free of corrosive gases, explosive gases, vapors, and dust.                                                                                                                                                                                                                                                                    |
| Method of Mounting <sup>Note: 3</sup>  | CHHM Type: Slow speed shaft in horizontal direction and with foot<br>CHFM Type: Slow speed shaft in horizontal direction and with flange (not for 6000SK Series)<br>CVVM Type: Slow speed shaft down in vertical direction and with V-flange<br>*Models with "N" for the second nomenclature symbol (such as CNHM Type) may be mounted in any direction. |
| Method of Coupling with Driven Machine | Coupling, gears, chain sprocket or belt.                                                                                                                                                                                                                                                                                                                 |
| Painting                               | Type: Acrylic modified phthalic<br>Color: Equivalent to Munsell 6.5PB 3.6/8.2.                                                                                                                                                                                                                                                                           |

- Note: 1. Refer to the technical section (Page F-31~57) for motor specification other than standard one.  
 2. Consult us when λ - Δ start is necessary for non-standard voltage.  
 3. Models for universal mounting (types with N for the second digit of nomenclature) can be manufactured for following frame sizes only. Other frame sizes require indication for mounting direction.

[Frame sizes for universal mounting direction] \*□ of the frame size indicates 0, 5, or H.  
 606□, 607□, 608□, 609□, 610□, 611□, 612□,  
 606□DA, 607□DA, 608□DA, 609□DA, 610□DA, 612□DA, 612□DB

## Direction of Withdrawing Lead Wire

| Main frame mounting direction                              | Standard                                                                            |
|------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Horizontal Type (Slow speed shaft in horizontal direction) |  |
| Vertical Type (Slow speed shaft in vertical direction)     |                                                                                     |

Note: Whenever not specified, the above direction shall be used. When the direction of withdrawal from the terminal box is other than specified above, refer to Page F-34.

# Model Selection

Select models referring to the following flowchart. Consult us if there is any question.

## Step 1: Determination of Operating Condition

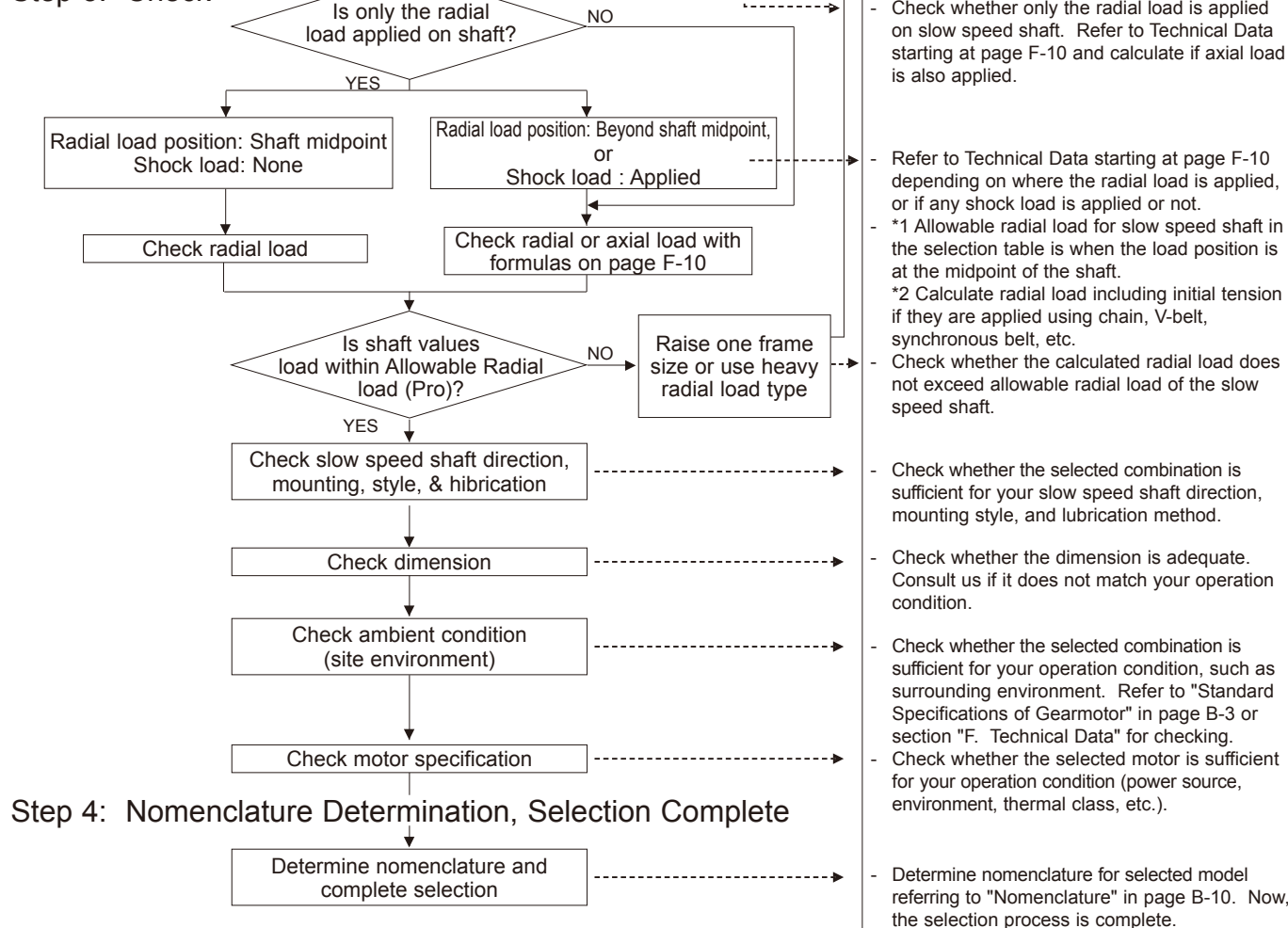
Determine the following condition before starting selection.

- Application
- Continuous operation, or operation with frequent startup and stop
- Motor capacity (kW) and output speed or reduction ratio
- Radial load and axial load
- Operation hours per day
- Level of shock load
- Mounting direction (slow speed shaft direction), mounting shape
- Motor specification (power source frequency, voltage, with or without brake, etc.)
- Other ambient conditions (temperature, humidity, indoor or outdoor, and other environments)

\* Refer to section "D. CYCLO® GEARMOTORS (WITH AF MOTOR FOR INVERTERS)" for gearmotors with inverter motors.

## Step 2: Model Selection

## Step 3: Check



## Step 4: Nomenclature Determination, Selection Complete

## Model Selection

## Description of Our Selection Table

This is a brief description of our tables on page B-13 and after.

Motor capacity [kW]

Input speed [r/min] (Indicated for each motor frequency and number of poles.)

|        |  |                |       |      |     |      |      |                              |  |                                                                                                  |
|--------|--|----------------|-------|------|-----|------|------|------------------------------|--|--------------------------------------------------------------------------------------------------|
| 7.5 kW |  | Hz             |       | 50Hz |     | 60Hz |      | n <sub>1</sub> : Motor Speed |  | <br>CHHM/CNHM |
|        |  | P              |       | 4    | 6   | 4    | 6    |                              |  |                                                                                                  |
|        |  | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |                              |  |                                                                                                  |

| 50Hz                           |                                   |         |                              |       | 60Hz |                                |                                   |         |                              | Nomenclature |      |                          |            |                 |
|--------------------------------|-----------------------------------|---------|------------------------------|-------|------|--------------------------------|-----------------------------------|---------|------------------------------|--------------|------|--------------------------|------------|-----------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> |         | Allowable Radial Load<br>Pro |       | SF   | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> |         | Allowable Radial Load<br>Pro |              | SF   | Input Capacity<br>Symbol | Frame Size | Reduction Ratio |
| [r/min]                        | [N-m]                             | [kgf-m] | [N]                          | [kgf] |      | [r/min]                        | [N-m]                             | [kgf-m] | [N]                          | [kgf]        |      |                          |            |                 |
| 242                            | 282                               | 28.7    | 5980                         | 610   | 1.25 | 292                            | 233                               | 23.8    | 5650                         | 576          | 1.25 | 10 -                     | 6130       | - 6             |
|                                |                                   |         | 5980                         | 610   | 1.51 |                                |                                   |         | 5650                         | 576          | 1.51 | 10 -                     | 6135       | - 6             |
|                                |                                   |         | 9330                         | 951   | 1.73 |                                |                                   |         | 8830                         | 901          | 1.73 | 10 -                     | 6140       | - 6             |
|                                |                                   |         | 9330                         | 951   | 2.01 |                                |                                   |         | 8830                         | 901          | 2.01 | 10 -                     | 6145       | - 6             |
|                                |                                   |         | 10400                        | 1070  | 2.71 |                                |                                   |         | 9830                         | 1000         | 2.71 | 10 -                     | 6160       | - 6             |
| 181                            | 375                               | 38.3    | 6650                         | 678   | 1.25 | 219                            | 311                               | 31.7    | 6290                         | 641          | 1.25 | 10 -                     | 6130       | - 8             |
|                                |                                   |         | 6650                         | 678   | 1.51 |                                |                                   |         | 6290                         | 641          | 1.51 | 10 -                     | 6135       | - 8             |
|                                |                                   |         | 10300                        | 1050  | 1.73 |                                |                                   |         | 9790                         | 998          | 1.73 | 10 -                     | 6140       | - 8             |
|                                |                                   |         | 10300                        | 1050  | 2.01 |                                |                                   |         | 9790                         | 998          | 2.01 | 10 -                     | 6145       | - 8             |
|                                |                                   |         | 11700                        | 1190  | 2.63 |                                |                                   |         | 11000                        | 1120         | 2.63 | 10 -                     | 6160       | - 8             |
| 132                            | 516                               | 52.6    | 7570                         | 771   | 1.25 | 159                            | 428                               | 43.6    | 7150                         | 729          | 1.25 | 10 -                     | 6130       | - 11            |
|                                |                                   |         | 7570                         | 771   | 1.51 |                                |                                   |         | 7150                         | 729          | 1.51 | 10 -                     | 6135       | - 11            |
|                                |                                   |         | 11600                        | 1180  | 1.73 |                                |                                   |         | 11000                        | 1120         | 1.73 | 10 -                     | 6140       | - 11            |
|                                |                                   |         | 11600                        | 1180  | 2.01 |                                |                                   |         | 11000                        | 1120         | 2.01 | 10 -                     | 6145       | - 11            |
|                                |                                   |         | 13200                        | 1350  | 2.63 |                                |                                   |         | 12500                        | 1270         | 2.63 | 10 -                     | 6160       | - 11            |
|                                |                                   |         | 7860                         | 801   | 1.25 |                                |                                   |         | 7430                         | 758          | 1.25 | 10 -                     | 6130       | - 13            |
|                                |                                   |         | 7860                         | 801   | 1.36 |                                |                                   |         | 7430                         | 758          | 1.51 | 10 -                     | 6135       | - 13            |

Output speed [r/min]

Service factor

Input capacity symbol - Frame size - Reduction ratio

\*Note that "reduction ratio = normal ratio" for models with "SK" at the end of frame size (6000 SK Series with "\*\*3" on the side of reduction ratio).  
(Indicated reduction ratio is the same as actual reduction ratios for other models.)

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# Selection Example

Below is an example selection process following the model selection procedure in page B-4.

## • Operation condition

- Application: Chain conveyor
- Operation hours per day: 24 hours/day
- Operation pattern: Continuous operation
- Load capacity: 0.7kW
- Output speed: 33.7r/min
- Connection with application:

Chain sprocket  
Initial tension = 0  
Sprocket pitch circle radius: R=61mm  
Load position: Midpoint of shaft

- Level of shock load: None
- Mounting direction (slow speed shaft direction), and mounting style:  
horizontal, foot mount

## - Motor specification

Electric frequency: 50Hz  
Voltage: 200V  
Brake: None  
Others: Indoor type

## - Surrounding condition

Ambient temperature 20°C for indoor use



The model is selected based on above operation conditions in this example.

| Operation condition, selection, and calculation results                                                                                                                                                  | Reference pages                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>• Select load factor</b><br>Load condition for chain conveyor application → Uniform load (U)<br>Load factor = 1.2 (U, 24 hours/day operation)                                                         | Page B-7~9<br>Table B-2: Reducer Load Classification<br>Table B-1: Reducer Load Factor |
| <b>• Select motor capacity</b><br>Load capacity=0.7kW → Motor capacity=0.75kW                                                                                                                            | Page A-7: Product Range of Motor                                                       |
| <b>• Select output speed</b><br>Power source frequency 50Hz, output speed 33.7r/min<br>→ $1450/33.7 = \text{Reduction ratio } 43$                                                                        | Page B-38: CYCLO® GEARMOTORS Selection Tables                                          |
| <b>• Check output torque</b><br>$T_L = \frac{9550 \times 0.7(\text{kW})}{1450} \times 43 = 199 \text{ N}\cdot\text{m} \leq 202 \text{ N}\cdot\text{m} \rightarrow \text{OK}$ T <sub>L</sub> =Load torque | Page B-38: CYCLO® GEARMOTORS Selection Tables                                          |
| <b>• Determine reducer frame size</b><br>Load factor = $1.2 \leq 1.44$<br>Reducer frame size & reduction ratio: 1-6105-43                                                                                | Page B-38: CYCLO® GEARMOTORS Selection Tables                                          |
| <b>• Check radial load</b><br>$Pr = TL/R \leq Pro/Cf$<br>$Pr = 199(\text{N}\cdot\text{m})/0.061(\text{m}) = 3262(\text{N}) \leq 5400(\text{N})/1 = 5400(\text{N}) \rightarrow \text{OK}$                 | Page F-10: Allowable Radial and Axial Load                                             |
| <b>• Check slow speed shaft direction, mounting style, lubrication method</b><br>Slow speed shaft direction: Horizontal, Mounting style: Foot mount<br>→ Nomenclature: CNHM (Grease lubrication method)  | Page B-38: CYCLO® GEARMOTORS Selection Tables                                          |
| <b>• Check dimension</b><br>Check dimension using Dimension Tables.                                                                                                                                      | Page B-10: Nomenclature                                                                |
| <b>• Check surrounding condition</b><br>Ambient temperature: 20°C → OK                                                                                                                                   | Page B-101: Dimension Tables                                                           |
| <b>• Check motor specification</b><br>200V, 50Hz, for indoor use → OK with standard specificationn                                                                                                       | Page B-3: Standard Specifications of Gearmotor                                         |
| <b>■ Determine nomenclature</b><br>Determine nomenclature: CNHM1-6105-43                                                                                                                                 | Page A-7: Product Range of Motor                                                       |
| The selection is complete.                                                                                                                                                                               | Page B-10: Nomenclature                                                                |

# Selection of Load Factor

The Load Factor is rated for the characteristics of the driven machine.

The tabulated ratings are based on a running time of 10 hours per day with uniform load.

For your reference, please see method (1) and (2) shown below.

## (1) Recommended Load Factor by the Driven Application.

[Load Factor]      U: Uniform load      M: Moderate shock      H: Heavy shock

**Table B-1 Reducer Load Factor**

| Daily duty  | ~3 hours/day |      |      | ~10 hours/day |      |      | ~24 hours/day |      |      |
|-------------|--------------|------|------|---------------|------|------|---------------|------|------|
|             | U            | M    | H    | U             | M    | H    | U             | M    | H    |
| Load Factor | 0.80         | 1.00 | 1.35 | 1.00          | 1.20 | 1.50 | 1.20          | 1.35 | 1.60 |

**Table B-2 Recommended Load Classifications**

| Type of APPLICATION                    | Type of LOAD | Type of APPLICATION                             | Type of LOAD | Type of APPLICATION                              | Type of LOAD | Type of APPLICATION                                   | Type of LOAD |
|----------------------------------------|--------------|-------------------------------------------------|--------------|--------------------------------------------------|--------------|-------------------------------------------------------|--------------|
| *Aerator                               |              | Elevators                                       |              | slab conveyor.....                               | H            | suction roll.....                                     | U            |
| Agitators.                             |              | bucket - uniform load.....                      | U            | small waste-conveyor-belt.....                   | U            | washers & thickeners.....                             | M            |
| pure liquids.....                      | U            | bucket - heavy load.....                        | M            | small waste-conveyor-chain.....                  | M            | winders.....                                          | U            |
| liquids & solids.....                  | M            | bucket - cont.....                              | U            | sorting table.....                               | M            | *Printing Presses                                     |              |
| liquids-variable density.....          | M            | centrifugal discharge.....                      | U            | tipple hoist conveyor.....                       | M            | Pullers                                               |              |
| Blowers                                |              | escalators.....                                 | U            | tipple hoist drive.....                          | M            | barge haul.....                                       | H            |
| centrifugal.....                       | U            | freight.....                                    | M            | transfer conveyors.....                          | M            | Pumps                                                 |              |
| lobe.....                              | M            | gravity discharge.....                          | U            | transfer rolls.....                              | M            | centrifugal.....                                      | U            |
| vane.....                              | U            | *man lifts.....                                 | M            | tray drive.....                                  | M            | proportioning.....                                    | M            |
| Brewing & Distilling                   |              | *passenger.....                                 | M            | trimmer feed.....                                | M            | reciprocating single acting, 3 or more cylinders..... | M            |
| bottling machinery.....                | U            | **Extruders (Plastics)                          |              | waste conveyor.....                              | M            | double acting, 2 or more cylinders.....               | M            |
| brew kettles, cont. duty.....          | U            | blow molders.....                               | M            | Machine Tools                                    |              | *single acting, 1 or 2 cylinders.....                 | U            |
| cookers-cont. duty.....                | U            | coating.....                                    | U            | bending roll.....                                | M            | *double acting, single cylinder.....                  | U            |
| mash tubs-cont. duty.....              | U            | film.....                                       | U            | punch press-gear driven.....                     | H            | rotary-gear type.....                                 | U            |
| scale hopper, frequent starts.....     | M            | pipe.....                                       | U            | *notching press-belt driven.....                 | H            | rotary-lobe, vane.....                                | U            |
| Can Filling Machines.....              | U            | pre-plasticizers.....                           | M            | plate planers.....                               | H            | Rubber & Plastics Industries                          |              |
| *Cane Knives.....                      | M            | rods.....                                       | U            | tapping machine.....                             | H            | **crackers.....                                       | H            |
| Car Dumpers.....                       | H            | sheet.....                                      | U            | other machine tools                              |              | laboratory equipment.....                             | M            |
| Car Pullers.....                       | M            | tubing.....                                     | U            | main drives.....                                 | M            | **mixing mills.....                                   | H            |
| Clarifiers.....                        | U            | Fans                                            |              | auxiliary drives.....                            | U            | **refiners.....                                       | M            |
| Classifiers.....                       | M            | centrifugal.....                                | U            | Metal Mills                                      |              | **rubber calendars.....                               | M            |
| Clay Working Machinery                 |              | *cooling towers.....                            | U            | draw bench carriage & main drive.....            | M            | **rubber mill (2 on line).....                        | M            |
| brick press.....                       | H            | induced draft.....                              | U            | forming machines.....                            | H            | **rubber mill (3 on line).....                        | U            |
| briquette machine.....                 | H            | *forced draft.....                              | M            | *pinch, dryer & scrubber rolls, reversing.....   | M            | **sheeter.....                                        | M            |
| clay working machinery.....            | M            | large (mine, etc.).....                         | M            | slitters.....                                    | M            | *tire building machines.....                          | U            |
| pug mill.....                          | M            | large (industrial).....                         | M            | table conveyors-non-reversing group drives.....  | M            | *tire & tube press openers.....                       | M            |
| Compressors                            |              | light (small diameter).....                     | U            | individual drives.....                           | H            | **tubers & strainers.....                             | M            |
| centrifugal.....                       | U            | Feeders                                         |              | *table conveyors-reversing.....                  | M            | **warming mills.....                                  | M            |
| lobe.....                              | M            | apron.....                                      | M            | wire drawing & flattening machine.....           | M            | Sand Muller.....                                      | M            |
| reciprocating, multi-cylinder.....     | M            | belt.....                                       | M            | wire winding machine.....                        | M            | Screens                                               |              |
| reciprocating, single-cylinder.....    | H            | disc.....                                       | U            | Mills, Rotary Type                               |              | air washing.....                                      | U            |
| Conveyors-Uniformly Loaded or Fed      |              | reciprocating.....                              | H            | **ball.....                                      | M            | rotary-stone or gravel.....                           | M            |
| apron.....                             | U            | screw.....                                      | M            | *cement kilns.....                               | M            | traveling water intake.....                           | U            |
| assembly.....                          | U            | Food industry                                   |              | **dryers & coolers.....                          | M            | Sewage Disposal Equipment                             |              |
| belt.....                              | U            | beet slicer.....                                | M            | kilns.....                                       | M            | bar screens.....                                      | U            |
| bucket.....                            | U            | cereal cooker.....                              | U            | **pebble.....                                    | M            | chemical feeders.....                                 | U            |
| chain.....                             | U            | dough mixer.....                                | M            | **rod , plain & wedge bar.....                   | M            | collectors, circuline or straightline.....            | U            |
| flight.....                            | U            | meat grinders.....                              | M            | tumbling barrels.....                            | H            | dewatering screws.....                                | M            |
| oven.....                              | U            | Generators (not welding).....                   | U            | Mixers                                           |              | grit collectors.....                                  | U            |
| screw.....                             | U            | Hammer mills.....                               | H            | concrete mixers, cont.....                       | M            | scum breakers.....                                    | M            |
| Conveyors-Heavy Duty Not Uniformly Fed |              | Hoists                                          |              | concrete mixers, intermittent.....               | M            | slow or rapid mixers.....                             | U            |
| apron.....                             | M            | heavy duty.....                                 | H            | constant density.....                            | U            | sludge collectors.....                                | U            |
| assembly.....                          | M            | medium duty.....                                | M            | variable density.....                            | M            | thickeners.....                                       | M            |
| belt.....                              | M            | skip hoist.....                                 | M            | Oil Industry                                     |              | vacuum filters.....                                   | M            |
| bucket.....                            | M            | Laundry Washers                                 |              | chillers.....                                    | M            | Slab Pushers.....                                     | M            |
| chain.....                             | M            | reversing.....                                  | M            | *oil well pumping.....                           | M            | *Steering Gear                                        |              |
| flight.....                            | M            | Laundry Tumblers.....                           | M            | paraffin filter press.....                       | M            | Stokers.....                                          | U            |
| *live roll.....                        | M            | Line Shaft                                      |              | rotary kilns.....                                | M            | Sugar Industry                                        |              |
| oven.....                              | M            | driving processing equipment.....               | M            | Paper Mills                                      |              | **cane knives.....                                    | M            |
| reciprocating.....                     | H            | light.....                                      | U            | agitators (mixers).....                          | M            | **crushers.....                                       | M            |
| screw.....                             | M            | other line shafts.....                          | U            | barker-auxiliaries-hydraulic.....                | M            | **mills.....                                          | H            |
| shaker.....                            | M            | Lumber Industry                                 |              | barker-mechanical.....                           | M            | Textile Industry                                      |              |
| Cranes (Except for Dry Dock Cranes)    |              | barkers-hydraulic-mechanical.....               | H            | barking drum.....                                | H            | batchers.....                                         | M            |
| main hoists.....                       | M            | burner conveyor.....                            | M            | beater & pulper.....                             | M            | calendars.....                                        | M            |
| *bridge travel.....                    | H            | chain saw & drag saw.....                       | H            | bleacher.....                                    | U            | cards.....                                            | M            |
| *trolley travel.....                   | H            | chain transfer.....                             | H            | calendars.....                                   | M            | dry cans.....                                         | M            |
| Crusher                                |              | craneway transfer.....                          | H            | calendars-super.....                             | H            | dryers.....                                           | M            |
| ore.....                               | H            | de-barking drum.....                            | H            | converting machine, except cutters, platers..... | M            | dyeing machinery.....                                 | M            |
| stone.....                             | H            | edger feed.....                                 | M            | conveyors.....                                   | U            | *knitting machines.....                               | U            |
| **sugar.....                           | M            | gang feed.....                                  | H            | couch.....                                       | M            | looms.....                                            | M            |
| Dredges                                |              | green chain.....                                | M            | cutters-platers.....                             | H            | mangles.....                                          | M            |
| cable reels.....                       | M            | live rolls.....                                 | H            | cylinders.....                                   | M            | nappers.....                                          | M            |
| conveyors.....                         | M            | log haul-locline.....                           | H            | dryers.....                                      | M            | pads.....                                             | M            |
| cutter head drives.....                | H            | log haul-well type.....                         | H            | Paper Mills                                      |              | *range drives.....                                    | M            |
| jig drives.....                        | H            | log turning device.....                         | H            | felt stretcher.....                              | M            | slashes.....                                          | M            |
| maneuvering winches.....               | M            | main log conveyor.....                          | H            | felt whipper.....                                | M            | soapers.....                                          | M            |
| pumps.....                             | M            | off bearing rolls.....                          | M            | jordans.....                                     | H            | spinners.....                                         | M            |
| screen drive.....                      | H            | planer feed chains.....                         | M            | log haul.....                                    | H            | tenter frames.....                                    | M            |
| stackers.....                          | M            | planer floor chains.....                        | M            | presses.....                                     | U            | washers.....                                          | M            |
| utility winches.....                   | M            | planer tilting hoist.....                       | M            | pulp machine reel.....                           | M            | winders.....                                          | M            |
| *Dry Dock Cranes                       |              | re-saw merry- go-round conveyor roll cases..... | H            | stock chests.....                                | M            | *Windlass                                             |              |

Remarks: \* Refer to factory.

\*\* To be selected on basis of 24hr. service only.

Note: Table above contains reference value. Names and mechanical characteristics of the actual machine may differ from the table above.

# Selection of Load Factor

## (2) Recommended Load Factor Modifications for Frequent Start-Stop Operation

Please see table B-3 and B-4.

**Table B-3 Number of Starts-Stops and Load Factor**

| Number of starts-stops<br>[times/hour] | ~3 hours/day |      |      | ~10 hours/day |      |      | ~24 hours/day |      |      |
|----------------------------------------|--------------|------|------|---------------|------|------|---------------|------|------|
|                                        | I            | II   | III  | I             | II   | III  | I             | II   | III  |
| ~10                                    | 0.80         | 1.00 | 1.20 | 1.00          | 1.10 | 1.35 | 1.20          | 1.25 | 1.50 |
| ~200                                   | 0.85         | 1.10 | 1.30 | 1.10          | 1.30 | 1.50 | 1.25          | 1.50 | 1.65 |
| ~500                                   | 0.90         | 1.20 | 1.40 | 1.15          | 1.45 | 1.60 | 1.30          | 1.60 | 1.75 |

The ratio of Moment of Inertia (The ratio of  $GD^2$ ) =  $\frac{\text{Total Moment of Inertia (GD}^2\text{) as seen from the motor shaft}}{\text{Moment of Inertia (GD}^2\text{) of motor}}$

Load Factor      1: Allowable ratio of Moment of Inertia ( $GD^2$ )  $\leq 0.3$   
                          2: Allowable ratio of Moment of Inertia ( $GD^2$ )  $\leq 3$   
                          3: Allowable ratio of Moment of Inertia ( $GD^2$ )  $\leq 10$

Note: 1. The number of starts-stops includes brake or clutch operation times.  
 2. Consult us when starting under loaded conditions.  
 3. Consult us when start-stop frequency exceeds 500 times/hour. Brake for high frequency use may be necessary.

**Table B-4 MOTOR THERMAL RATING (C × Z)**

| Motor Power<br>[kW] | Allowable C × Z |               |               |                | Motor moment of inertia kg·m <sup>2</sup> |            | Motor GD <sup>2</sup> |            |
|---------------------|-----------------|---------------|---------------|----------------|-------------------------------------------|------------|-----------------------|------------|
|                     | (35%ED)         | (35%ED~50%ED) | (50%ED~80%ED) | (80%ED~100%ED) | Standard                                  | With brake | Standard              | With brake |
| 0.1                 | 3200            | 3000          | 2000          | 1200           | 0.00033                                   | 0.00035    | 0.0013                | 0.0014     |
| 0.2                 | 2200            | 2800          | 2800          | 2500           | 0.00050                                   | 0.00055    | 0.002                 | 0.0022     |
| 0.25                | 2200            | 2800          | 2800          | 2500           | 0.00050                                   | 0.00055    | 0.002                 | 0.0022     |
| 0.4                 | 1800            | 2200          | 1500          | 1500           | 0.00065                                   | 0.00068    | 0.0026                | 0.0027     |
| 0.55                | 1800            | 2200          | 1500          | 1500           | 0.00101                                   | 0.00111    | 0.00405               | 0.00445    |
| 0.75                | 1400            | 1400          | 800           | 500            | 0.00120                                   | 0.00130    | 0.0048                | 0.0052     |
| 1.1                 | 1400            | 1400          | 800           | 500            | 0.00185                                   | 0.00208    | 0.0074                | 0.0083     |
| 1.5                 | 1200            | 1200          | 500           | 400            | 0.00213                                   | 0.00235    | 0.0085                | 0.0094     |
| 2.2                 | 1000            | 900           | 400           | 200            | 0.00333                                   | 0.00373    | 0.0133                | 0.0149     |
| 3.0                 | 1000            | 900           | 400           | 200            | 0.00700                                   | 0.00810    | 0.0281                | 0.0325     |
| 3.7                 | 800             | 800           | 800           | 700            | 0.00848                                   | 0.00958    | 0.0339                | 0.0383     |
| 5.5                 | 300             | 300           | 200           | 150            | 0.01143                                   | 0.01253    | 0.0457                | 0.0501     |
| 7.5                 | 400             | 350           | 300           | 300            | 0.02675                                   | 0.03025    | 0.1070                | 0.121      |
| 11                  | 200             | 200           | 150           | 150            | 0.03750                                   | 0.04100    | 0.1500                | 0.164      |

C × Z calculated by below steps (1) ~ (3) must be less than allowable C × Z listed in Table B-4.

(1) Calculate C from formula below.

$$[\text{SI units}] \quad C = \frac{J_M + J_L}{J_M}$$

$J_M$ ; Moment of inertia of motor [kg·m<sup>2</sup>]  
 $J_L$ ; Total moment of inertia (excluding motor) at motor shaft [kg·m<sup>2</sup>]

$$[\text{Gravitational units}] \quad C = \frac{GD_M^2 + GD_L^2}{GD_M^2}$$

$GD_M^2$ ;  $GD^2$  of motor [kgf·m<sup>2</sup>]  
 $GD_L^2$ ; Total  $GD^2$  (excluding motor) at motor shaft [kgf·m<sup>2</sup>]

Continues to the next page.



# Selection of Load Factor

(2) Calculate Z (number of startup times/hour).

- (a) Assume that one operating period consists of "on time  $t_a$  [sec]" and "off time  $t_b$  [sec]" and the motor is started  $n_r$  [times/cycle].

$$Z_r = \frac{3600n_r}{t_a + t_b} \text{ [times/hr]}$$

- (b) When inching,  $n_i$  [times/cycle] is included in 1 cycle ( $t_a+t_b$ ), the number of inching times per hour  $Z_i$ , and then included in the number of starts.

$$Z_i = \frac{3600n_i}{t_a + t_b} \text{ [times/hr]}$$

- (c) Calculate Z [times/hr] by (a) and (b).

$$Z = Z_r + \frac{1}{2} Z_i = \frac{3600n_r}{t_a + t_b} \cdot \left( n_r + \frac{1}{2} n_i \right) \text{ [times/hr]}$$

(3) Calculate C multiplied by Z.

Use the C obtained in step (1) and Z in step (2).

(4) Obtain the duty cycle %ED and check with table above.

$$\%ED = \frac{t_a}{t_a + t_b} \times 100$$

# Nomenclature

| Slow Speed Shaft Direction         |   |
|------------------------------------|---|
| Horizontal, slow speed shaft level | H |
| Vertical, slow speed shaft down    | V |
| Vertically, slow speed shaft up    | W |
| Universal mounting                 | N |

| Mounting style |   |
|----------------|---|
| Foot           | H |
| V flange       | V |
| Flange         | F |

| Type of Input |    |
|---------------|----|
| Gearmotor     | M  |
| With adaptor  | JM |

| Special Specifications |       |
|------------------------|-------|
| Standard specification | blank |
| Special specification  | S     |

## Motor Capacity Symbol

|    | Capacity symbol | 01        | 02        | 03         | 05        | 08         | 1         |
|----|-----------------|-----------|-----------|------------|-----------|------------|-----------|
|    | kW (HP)         | 0.1 (1/8) | 0.2 (1/4) | 0.25 (1/3) | 0.4 (1/2) | 0.55 (3/4) | 0.75 (1)  |
| 4P | Capacity symbol | 1H        | 2         | 3          | 4         | 5          | 8         |
|    | kW (HP)         | 1.1 (1.5) | 1.5 (2)   | 2.2 (3)    | 3.0 (4)   | 3.7 (5)    | 5.5 (7.5) |
|    | Capacity symbol | 10        | 15        | 20         | 25        | 30         | 40        |
|    | kW (HP)         | 7.5 (10)  | 11 (15)   | 15 (20)    | 18.5 (25) | 22 (30)    | 30 (40)   |
|    | Capacity symbol | 50        | 60        | 75         | 100       |            |           |
|    | kW (HP)         | 37 (50)   | 45 (60)   | 55 (75)    | 75 (100)  |            |           |
| 6P | Capacity symbol | 016       | 026       | 036        | 056       | 086        | 16        |
|    | kW (HP)         | 0.1 (1/8) | 0.2 (1/4) | 0.25 (1/3) | 0.4 (1/2) | 0.55 (3/4) | 0.75 (1)  |
|    | Capacity symbol | 1H6       | 26        | 36         | 46        | 56         | 86        |
|    | kW (HP)         | 1.1 (1.5) | 1.5 (2)   | 2.2 (3)    | 3.0 (4)   | 3.7 (5)    | 5.5 (7.5) |
|    | Capacity symbol | 106       | 156       | 206        | 256       | 306        | 406       |
|    | kW (HP)         | 7.5 (10)  | 11 (15)   | 15 (20)    | 18.5 (25) | 22 (30)    | 30 (40)   |
|    | Capacity symbol | 506       | 606       | 756        | 1006      | 1256       | 1506      |
|    | kW (HP)         | 37 (50)   | 45 (60)   | 55 (75)    | 75 (100)  | 90 (125)   | 110 (150) |
|    | Capacity symbol | 1756      |           |            |           |            |           |
|    | kW (HP)         | 132 (175) |           |            |           |            |           |

| Shaft specification   |   |
|-----------------------|---|
| Metric JIS (Standard) | - |
| Inch size             | Y |
| Metric DIN            | G |

| Suffix                        |    |                          |    |
|-------------------------------|----|--------------------------|----|
| Standard                      | -  | Low Backlash             | LB |
| High Capacity Bearing         | R1 | With AF (inverter) motor | AV |
| High Cap. Brg. Ductile Casing | R2 | Servo Motor              | SV |
| Baseplate                     | BP | DC Motor                 | DV |
| HH Type Ceiling               | H1 | High Efficiency Motor    | ES |
| Modification Left Wall        | H2 | Torque Limiter           | TL |
| Modification Right Wall       | H3 |                          |    |

| With or Without Brake |   |
|-----------------------|---|
| Without brake         | - |
| With brake            | B |

Frame size  
(Refer to Selection  
Tables starting from  
page B-13.)

Nominal ratio

C N H M 1 6105 51

Motor capacity  
symbol

Special  
specification  
symbol

Type of input

Mounting style

Slow speed shaft direction

CYCLO DRIVE (C)

Frame size

Shaft  
specification

Suffix

With or  
Without  
brake

Reduction  
ratio

# Nomenclature and Product Examples

## Nomenclature Examples (Gearmotor)

### Example 1.

**CNHM2 - 6115 - 29**

|       |                            |                       |
|-------|----------------------------|-----------------------|
| C:    | Model                      | - CYCLO® DRIVE        |
| N:    | Slow speed shaft direction | - Universal direction |
| H:    | Mounting style             | - Foot                |
| M:    | Type of input              | - Gearmotor type      |
| 2:    | Motor capacity             | - 1.5kW               |
| 6115: | Frame size                 | - 6115                |
| 29:   | Reduction ratio            | - 29                  |

### Example 2.

**CVVM5 - 6195DA - B - 377**

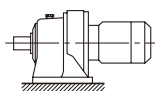
|         |                            |                     |
|---------|----------------------------|---------------------|
| C:      | Model                      | - CYCLO® DRIVE      |
| V:      | Slow speed shaft direction | - Vertical mounting |
| V:      | Mounting style             | - V flange          |
| M:      | Type of input              | - Gearmotor type    |
| 5:      | Motor capacity             | - 3.7kW             |
| 6195DA: | Frame size                 | - 6195DA            |
| B:      | Brake                      | - With brake        |
| 377:    | Reduction ratio            | - 377               |

## Product and Nomenclature Symbol Examples (Gearmotor)

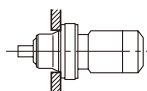
Standard and various application products of CYCLO® GEARMOTOR are classified by their nomenclature symbol as below. Refer to specific catalogs or consult us for details on our application products.

### CYCLO® GEARMOTOR

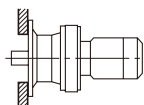
CHHM  
(CNHM)



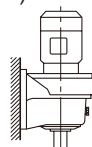
CHFM  
(CNFM)



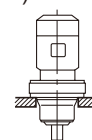
CHVM  
(CNVM)



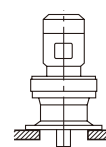
CVHM  
(CNHM)



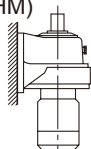
CVFM  
(CNFM)



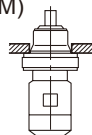
CVVM  
(CNVM)



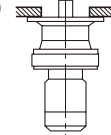
CWHM  
(CNHM)



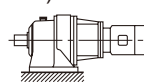
CWFM  
(CNFM)



CWVM  
(CNVM)

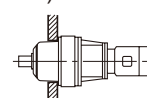


CHHJM  
(CNHJM)



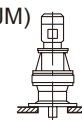
With Adaptor

CHFJM  
(CNFJM)



With Adaptor

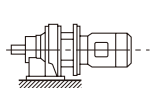
CVVJM  
(CNVJM)



With Adaptor

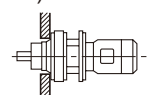
### CYCLO® GEARMOTOR Application Products

CHHXM  
(CNHXM)



Input Side Hollow Shaft

CHFXM  
(CNFXM)



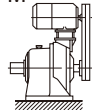
Input Side Hollow Shaft

CVVXM  
(CNVXM)



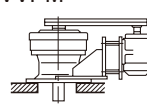
Input Side Hollow Shaft

CHHPM



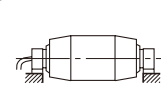
Top Mount Type

CVVPM



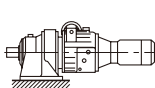
Side Mount Type

CPM



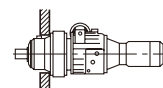
Cyclo Motor Pulley

CHHBM



Beier Cyclo Variator

CHFBM



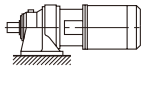
Beier Cyclo Variator

CVVBM



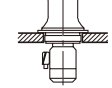
Beier Cyclo Variator

CHHCM



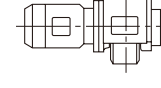
Cyclo Pack with Clutch Brake

C11WM



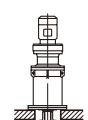
Cyclo Capstan

C10CM



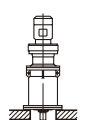
Cyclo Wheel

C14VM

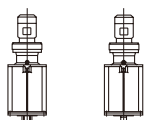


Vertical Special Base Mount

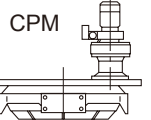
C15VM



C17VM C18VM



Vertical Special Base Mount



Center Post Type

|   |   |   |   |
|---|---|---|---|
| M | E | M | O |
|---|---|---|---|

GEARMOTORS

# How to Select

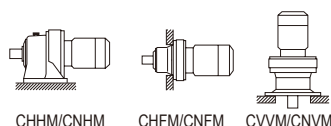
# **B** CYCLO® GEARMOTORS

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## 2. Selection Tables



## Selection Tables Gearmotors



|        |                      |      |     |      |      |
|--------|----------------------|------|-----|------|------|
| 0.1 kW | Hz                   | 50Hz |     | 60Hz |      |
|        | P                    | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> r/min | 1450 | 980 | 1750 | 1165 |

n<sub>1</sub>: Motor Speed

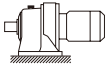
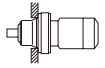
| 50Hz                                      |                                                       |                                              |      |     |      | 60Hz                                      |                                                       |                                              |      |     |      | Nomenclature            |            |                 | Page of Dimension Sheet |       |       |
|-------------------------------------------|-------------------------------------------------------|----------------------------------------------|------|-----|------|-------------------------------------------|-------------------------------------------------------|----------------------------------------------|------|-----|------|-------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m]    [kgf·m] | Allowable Radial Load<br>Pro<br>[N]    [kgf] |      | SF  |      | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m]    [kgf·m] | Allowable Radial Load<br>Pro<br>[N]    [kgf] |      | SF  |      | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVN  |
| 12.2                                      | 74.5                                                  | 7.59                                         | 3340 | 340 | 1.25 | 14.7                                      | 61.7                                                  | 6.29                                         | 3340 | 340 | 1.25 | 01 - 6090               | -          | 119             | B-100                   | B-116 | B-135 |
|                                           |                                                       |                                              | 3340 | 340 | 1.45 |                                           |                                                       |                                              | 3340 | 340 | 1.51 | 01 - 6095               | -          | 119             | B-100                   | B-116 | B-135 |
| 12.0                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 14.5                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 01 - 6060DA             | -          | 121             | B-108                   | B-124 | B-143 |
|                                           | 30.0                                                  | 3.06                                         | 1140 | 116 | *    |                                           | 30.0                                                  | 3.06                                         | 1140 | 116 | *    | 01 - 6065DA             | -          | 121             | B-108                   | B-124 | B-143 |
|                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    |                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    | 01 - 6070DA             | -          | 121             | B-108                   | B-124 | B-143 |
|                                           | 50.8                                                  | 5.18                                         | 1770 | 180 | *    |                                           | 50.8                                                  | 5.18                                         | 1770 | 180 | *    | 01 - 6075DA             | -          | 121             | B-108                   | B-124 | B-143 |
|                                           | 71.7                                                  | 7.31                                         | 3340 | 340 | 2.09 |                                           | 59.4                                                  | 6.06                                         | 3340 | 340 | 2.52 | 01 - 6090DA             | -          | 121             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 3340 | 340 | 2.24 |                                           |                                                       |                                              | 3340 | 340 | 2.70 | 01 - 6095DA             | -          | 121             | B-108                   | B-124 | B-143 |
| 10.1                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 12.2                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 01 - 6060DA             | -          | 143             | B-108                   | B-124 | B-143 |
|                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    |                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    | 01 - 6065DA             | -          | 143             | B-108                   | B-124 | B-143 |
|                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    |                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    | 01 - 6070DA             | -          | 143             | B-108                   | B-124 | B-143 |
|                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    |                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    | 01 - 6075DA             | -          | 143             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 3340 | 340 | 1.77 |                                           |                                                       |                                              | 3340 | 340 | 2.14 | 01 - 6090DA             | -          | 143             | B-108                   | B-124 | B-143 |
|                                           | 84.8                                                  | 8.64                                         | 3340 | 340 | 2.16 |                                           | 70.2                                                  | 7.16                                         | 3340 | 340 | 2.61 | 01 - 6095DA             | -          | 143             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 5400 | 550 | 2.95 |                                           |                                                       |                                              | 5400 | 550 | 3.56 | 01 - 6100DA             | -          | 143             | B-108                   | B-124 | B-143 |
| 8.79                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 10.6                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 01 - 6060DA             | -          | 165             | B-108                   | B-124 | B-143 |
|                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    |                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    | 01 - 6065DA             | -          | 165             | B-108                   | B-124 | B-143 |
|                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    |                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    | 01 - 6070DA             | -          | 165             | B-108                   | B-124 | B-143 |
|                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    |                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    | 01 - 6075DA             | -          | 165             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 3340 | 340 | 1.53 |                                           |                                                       |                                              | 3340 | 340 | 1.85 | 01 - 6090DA             | -          | 165             | B-108                   | B-124 | B-143 |
|                                           | 97.8                                                  | 9.97                                         | 3340 | 340 | 2.04 |                                           | 81.0                                                  | 8.26                                         | 3340 | 340 | 2.47 | 01 - 6095DA             | -          | 165             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 5400 | 550 | 2.56 |                                           |                                                       |                                              | 5400 | 550 | 3.08 | 01 - 6100DA             | -          | 165             | B-108                   | B-124 | B-143 |
| 7.44                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 8.97                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 01 - 6060DA             | -          | 195             | B-108                   | B-124 | B-143 |
|                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    |                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    | 01 - 6065DA             | -          | 195             | B-108                   | B-124 | B-143 |
|                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    |                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    | 01 - 6070DA             | -          | 195             | B-108                   | B-124 | B-143 |
|                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    |                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    | 01 - 6075DA             | -          | 195             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 3340 | 340 | 1.30 |                                           |                                                       |                                              | 3340 | 340 | 1.57 | 01 - 6090DA             | -          | 195             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 3340 | 340 | 1.73 |                                           | 95.8                                                  | 9.76                                         | 3340 | 340 | 2.09 | 01 - 6095DA             | -          | 195             | B-108                   | B-124 | B-143 |
|                                           | 116                                                   | 11.8                                         | 5400 | 550 | 2.16 |                                           |                                                       |                                              | 5400 | 550 | 2.61 | 01 - 6100DA             | -          | 195             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 5400 | 550 | 2.60 |                                           |                                                       |                                              | 5400 | 550 | 3.13 | 01 - 6105DA             | -          | 195             | B-108                   | B-124 | B-143 |
| 6.28                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 7.58                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 01 - 6060DA             | -          | 231             | B-108                   | B-124 | B-143 |
|                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    |                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    | 01 - 6065DA             | -          | 231             | B-108                   | B-124 | B-143 |
|                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    |                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    | 01 - 6070DA             | -          | 231             | B-108                   | B-124 | B-143 |
|                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    |                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    | 01 - 6075DA             | -          | 231             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 3340 | 340 | 1.10 |                                           |                                                       |                                              | 3340 | 340 | 1.32 | 01 - 6090DA             | -          | 231             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 3340 | 340 | 1.46 |                                           |                                                       |                                              | 3340 | 340 | 1.76 | 01 - 6095DA             | -          | 231             | B-108                   | B-124 | B-143 |
|                                           | 137                                                   | 14.0                                         | 5400 | 550 | 1.83 |                                           | 113                                                   | 11.6                                         | 5400 | 550 | 2.20 | 01 - 6100DA             | -          | 231             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 5400 | 550 | 2.19 |                                           |                                                       |                                              | 5400 | 550 | 2.64 | 01 - 6105DA             | -          | 231             | B-108                   | B-124 | B-143 |
| 5.31                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 6.41                                      | 24.0                                                  | 2.45                                         | 1180 | 120 | *    | 01 - 6060DA             | -          | 273             | B-108                   | B-124 | B-143 |
|                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    |                                           | 30.0                                                  | 3.06                                         | 1180 | 120 | *    | 01 - 6065DA             | -          | 273             | B-108                   | B-124 | B-143 |
|                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    |                                           | 45.0                                                  | 4.59                                         | 1770 | 180 | *    | 01 - 6070DA             | -          | 273             | B-108                   | B-124 | B-143 |
|                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    |                                           | 60.0                                                  | 6.12                                         | 1770 | 180 | *    | 01 - 6075DA             | -          | 273             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 3340 | 340 | 1.24 |                                           |                                                       |                                              | 3340 | 340 | 1.49 | 01 - 6095DA             | -          | 273             | B-108                   | B-124 | B-143 |
|                                           | 162                                                   | 16.5                                         | 5400 | 550 | 1.54 |                                           | 134                                                   | 13.7                                         | 5400 | 550 | 1.86 | 01 - 6100DA             | -          | 273             | B-108                   | B-124 | B-143 |
|                                           |                                                       |                                              | 5400 | 550 | 1.85 |                                           |                                                       |                                              | 5400 | 550 | 2.24 | 01 - 6105DA             | -          | 273             | B-108                   | B-124 | B-143 |

GEARMOTORS

Selection Tables  
0.1 kW

6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

## Selection Tables Gearmotors

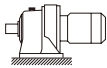
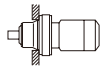
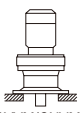
| 0.1 kW                                    |                                                    | n <sub>1</sub> : Motor Speed |                                           |            |             |  |                                                    |  |                                           |  |                         |                    |                 |                         |              |              |
|-------------------------------------------|----------------------------------------------------|------------------------------|-------------------------------------------|------------|-------------|-------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------|-------------------------|--------------------|-----------------|-------------------------|--------------|--------------|
|                                           |                                                    | Hz                           |                                           | 50Hz       |             |                                                                                     |                                                    |                                                                                     |                                           |                                                                                     |                         |                    |                 |                         |              |              |
|                                           |                                                    | P                            |                                           | 4          |             | 6                                                                                   |                                                    |                                                                                     |                                           |                                                                                     |                         |                    |                 |                         |              |              |
|                                           |                                                    | n <sub>1</sub> r/min         |                                           | 1450       |             | 980                                                                                 |                                                    | 1750                                                                                |                                           | 1165                                                                                |                         |                    |                 |                         |              |              |
|                                           |                                                    | 50Hz                         |                                           |            |             | 60Hz                                                                                |                                                    |                                                                                     |                                           | Nomenclature                                                                        |                         |                    |                 |                         |              |              |
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] |                              | Allowable Radial Load<br>Pro<br>[N] [kgf] |            | SF          | Output Speed<br>n <sub>2</sub><br>[r/min]                                           | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] |                                                                                     | Allowable Radial Load<br>Pro<br>[N] [kgf] |                                                                                     | Input Capacity - Symbol | Frame Size         | Reduction Ratio | Page of Dimension Sheet |              |              |
|                                           |                                                    |                              |                                           |            |             |                                                                                     |                                                    |                                                                                     |                                           |                                                                                     |                         |                    |                 | CNHM                    | CNFM         | CNVVM        |
| 4.55                                      | 24.0                                               | 2.45                         | 1180                                      | 120        | *           | 5.49                                                                                | 24.0                                               | 2.45                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6060DA        | - 319           | B-108                   | B-124        | B-143        |
|                                           | 30.0                                               | 3.06                         | 1180                                      | 120        | *           |                                                                                     | 30.0                                               | 3.06                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6065DA        | - 319           | B-108                   | B-124        | B-143        |
|                                           | 45.0                                               | 4.59                         | 1770                                      | 180        | *           |                                                                                     | 45.0                                               | 4.59                                                                                | 1770                                      | 180                                                                                 | *                       | 01 - 6070DA        | - 319           | B-108                   | B-124        | B-143        |
|                                           | 60.0                                               | 6.12                         | 1770                                      | 180        | *           |                                                                                     | 60.0                                               | 6.12                                                                                | 1770                                      | 180                                                                                 | *                       | 01 - 6075DA        | - 319           | B-108                   | B-124        | B-143        |
|                                           | 150                                                | 15.3                         | 3290                                      | 336        | *           |                                                                                     | 150                                                | 15.3                                                                                | 3290                                      | 336                                                                                 | *                       | 01 - 6090DA        | - 319           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | <b>3220</b>                               | <b>328</b> | <b>1.06</b> |                                                                                     |                                                    |                                                                                     | <b>3280</b>                               | <b>334</b>                                                                          | <b>1.28</b>             | <b>01 - 6095DA</b> | <b>- 319</b>    | <b>B-108</b>            | <b>B-124</b> | <b>B-143</b> |
|                                           | 189                                                | 19.3                         | 5400                                      | 550        | 1.32        |                                                                                     | 157                                                | 16.0                                                                                | 5400                                      | 550                                                                                 | 1.60                    | 01 - 6100DA        | - 319           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 5400                                      | 550        | 1.59        |                                                                                     |                                                    |                                                                                     | 5400                                      | 550                                                                                 | 1.91                    | 01 - 6105DA        | - 319           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 9810                                      | 1000       | 2.75        |                                                                                     |                                                    |                                                                                     | 9810                                      | 1000                                                                                | 3.32                    | 01 - 6120DA        | - 319           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              |                                           |            |             |                                                                                     |                                                    |                                                                                     |                                           |                                                                                     |                         |                    |                 |                         |              |              |
| 3.85                                      | 24.0                                               | 2.45                         | 1180                                      | 120        | *           | 4.64                                                                                | 24.0                                               | 2.45                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6060DA        | - 377           | B-108                   | B-124        | B-143        |
|                                           | 30.0                                               | 3.06                         | 1180                                      | 120        | *           |                                                                                     | 30.0                                               | 3.06                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6065DA        | - 377           | B-108                   | B-124        | B-143        |
|                                           | 45.0                                               | 4.59                         | 1770                                      | 180        | *           |                                                                                     | 45.0                                               | 4.59                                                                                | 1770                                      | 180                                                                                 | *                       | 01 - 6070DA        | - 377           | B-108                   | B-124        | B-143        |
|                                           | 60.0                                               | 6.12                         | 1770                                      | 180        | *           |                                                                                     | 60.0                                               | 6.12                                                                                | 1770                                      | 180                                                                                 | *                       | 01 - 6075DA        | - 377           | B-108                   | B-124        | B-143        |
|                                           | 150                                                | 15.3                         | 3290                                      | 336        | *           |                                                                                     | 150                                                | 15.3                                                                                | 3290                                      | 336                                                                                 | *                       | 01 - 6090DA        | - 377           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 3150                                      | 321        | 0.89        |                                                                                     |                                                    |                                                                                     | 3230                                      | 329                                                                                 | 1.08                    | 01 - 6095DA        | - 377           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 5400                                      | 550        | 1.12        |                                                                                     |                                                    |                                                                                     | 5400                                      | 550                                                                                 | 1.35                    | 01 - 6100DA        | - 377           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 5400                                      | 550        | 1.34        |                                                                                     |                                                    |                                                                                     | 5400                                      | 550                                                                                 | 1.62                    | 01 - 6105DA        | - 377           | B-108                   | B-124        | B-143        |
|                                           | 223                                                | 22.8                         | 9810                                      | 1000       | 2.33        |                                                                                     | 185                                                | 18.9                                                                                | 9810                                      | 1000                                                                                | 2.81                    | 01 - 6120DA        | - 377           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 9810                                      | 1000       | 2.33        |                                                                                     |                                                    |                                                                                     | 9810                                      | 1000                                                                                | 2.81                    | 01 - 6120DB        | - 377           | B-108                   | B-124        | B-143        |
| 3.07                                      | 24.0                                               | 2.45                         | 1180                                      | 120        | *           | 3.70                                                                                | 24.0                                               | 2.45                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6060DA        | - 473           | B-108                   | B-124        | B-143        |
|                                           | 30.0                                               | 3.06                         | 1180                                      | 120        | *           |                                                                                     | 30.0                                               | 3.06                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6065DA        | - 473           | B-108                   | B-124        | B-143        |
|                                           | 45.0                                               | 4.59                         | 1770                                      | 180        | *           |                                                                                     | 45.0                                               | 4.59                                                                                | 1770                                      | 180                                                                                 | *                       | 01 - 6070DA        | - 473           | B-108                   | B-124        | B-143        |
|                                           | 60.0                                               | 6.12                         | 1660                                      | 169        | *           |                                                                                     | 60.0                                               | 6.12                                                                                | 1660                                      | 169                                                                                 | *                       | 01 - 6075DA        | - 473           | B-108                   | B-124        | B-143        |
|                                           | 150                                                | 15.3                         | 3310                                      | 338        | *           |                                                                                     | 150                                                | 15.3                                                                                | 3310                                      | 338                                                                                 | *                       | 01 - 6090DA        | - 473           | B-108                   | B-124        | B-143        |
|                                           | 200                                                | 20.4                         | 3220                                      | 328        | *           |                                                                                     | 200                                                | 20.4                                                                                | 3220                                      | 328                                                                                 | *                       | 01 - 6095DA        | - 473           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | <b>5400</b>                               | <b>550</b> | <b>1.07</b> |                                                                                     |                                                    |                                                                                     | <b>5400</b>                               | <b>550</b>                                                                          | <b>1.29</b>             | <b>01 - 6105DA</b> | <b>- 473</b>    | <b>B-108</b>            | <b>B-124</b> | <b>B-143</b> |
|                                           | 280                                                | 28.6                         | 9810                                      | 1000       | 1.87        |                                                                                     | 232                                                | 23.7                                                                                | 9810                                      | 1000                                                                                | 2.26                    | 01 - 6120DA        | - 473           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 9810                                      | 1000       | 2.25        |                                                                                     |                                                    |                                                                                     | 9810                                      | 1000                                                                                | 2.71                    | 01 - 6125DA        | - 473           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              |                                           |            |             |                                                                                     |                                                    |                                                                                     |                                           |                                                                                     |                         |                    |                 |                         |              |              |
| 2.59                                      | 24.0                                               | 2.45                         | 1180                                      | 120        | *           | 3.13                                                                                | 24.0                                               | 2.45                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6060DA        | - 559           | B-108                   | B-124        | B-143        |
|                                           | 30.0                                               | 3.06                         | 1180                                      | 120        | *           |                                                                                     | 30.0                                               | 3.06                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6065DA        | - 559           | B-108                   | B-124        | B-143        |
|                                           | 45.0                                               | 4.59                         | 1770                                      | 180        | *           |                                                                                     | 45.0                                               | 4.59                                                                                | 1770                                      | 180                                                                                 | *                       | 01 - 6070DA        | - 559           | B-108                   | B-124        | B-143        |
|                                           | 60.0                                               | 6.12                         | 1660                                      | 169        | *           |                                                                                     | 60.0                                               | 6.12                                                                                | 1660                                      | 169                                                                                 | *                       | 01 - 6075DA        | - 559           | B-108                   | B-124        | B-143        |
|                                           | 150                                                | 15.3                         | 3310                                      | 338        | *           |                                                                                     | 150                                                | 15.3                                                                                | 3310                                      | 338                                                                                 | *                       | 01 - 6090DA        | - 559           | B-108                   | B-124        | B-143        |
|                                           | 200                                                | 20.4                         | 3220                                      | 328        | *           |                                                                                     | 200                                                | 20.4                                                                                | 3220                                      | 328                                                                                 | *                       | 01 - 6095DA        | - 559           | B-108                   | B-124        | B-143        |
|                                           | 250                                                | 25.5                         | 5400                                      | 550        | *           |                                                                                     | 250                                                | 25.5                                                                                | 5400                                      | 550                                                                                 | *                       | 01 - 6100DA        | - 559           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 4380                                      | 446        | 0.91        |                                                                                     |                                                    |                                                                                     | 5400                                      | 550                                                                                 | 1.09                    | 01 - 6105DA        | - 559           | B-108                   | B-124        | B-143        |
|                                           | 331                                                | 33.8                         | 9810                                      | 1000       | 1.58        |                                                                                     | 275                                                | 28.0                                                                                | 9810                                      | 1000                                                                                | 1.91                    | 01 - 6120DA        | - 559           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 9810                                      | 1000       | 1.90        |                                                                                     |                                                    |                                                                                     | 9810                                      | 1000                                                                                | 2.29                    | 01 - 6125DA        | - 559           | B-108                   | B-124        | B-143        |
| 2.23                                      | 45.0                                               | 4.59                         | 1770                                      | 180        | *           | 2.70                                                                                | 45.0                                               | 4.59                                                                                | 1770                                      | 180                                                                                 | *                       | 01 - 6070DA        | - 649           | B-108                   | B-124        | B-143        |
|                                           | 57.4                                               | 5.85                         | 1580                                      | 161        | *           |                                                                                     | 57.4                                               | 5.85                                                                                | 1580                                      | 161                                                                                 | *                       | 01 - 6075DA        | - 649           | B-108                   | B-124        | B-143        |
|                                           | 146                                                | 14.9                         | 3300                                      | 336        | *           |                                                                                     | 146                                                | 14.9                                                                                | 3300                                      | 336                                                                                 | *                       | 01 - 6090DA        | - 649           | B-108                   | B-124        | B-143        |
|                                           | 250                                                | 25.5                         | 5400                                      | 550        | *           |                                                                                     | 250                                                | 25.5                                                                                | 5400                                      | 550                                                                                 | *                       | 01 - 6100DA        | - 649           | B-108                   | B-124        | B-143        |
|                                           | 296                                                | 30.2                         | 5090                                      | 519        | *           |                                                                                     | 296                                                | 30.2                                                                                | 5090                                      | 519                                                                                 | *                       | 01 - 6105DA        | - 649           | B-108                   | B-124        | B-143        |
|                                           | 385                                                | 39.2                         | 9810                                      | 1000       | 1.36        |                                                                                     | 319                                                | 32.5                                                                                | 9810                                      | 1000                                                                                | 1.65                    | 01 - 6120DA        | - 649           | B-108                   | B-124        | B-143        |
| 1.98                                      | 24.0                                               | 2.45                         | 1180                                      | 120        | *           | 2.39                                                                                | 24.0                                               | 2.45                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6060DA        | - 731           | B-108                   | B-124        | B-143        |
|                                           | 30.0                                               | 3.06                         | 1180                                      | 120        | *           |                                                                                     | 30.0                                               | 3.06                                                                                | 1180                                      | 120                                                                                 | *                       | 01 - 6065DA        | - 731           | B-108                   | B-124        | B-143        |
|                                           | 45.0                                               | 4.59                         | 1770                                      | 180        | *           |                                                                                     | 45.0                                               | 4.59                                                                                | 1770                                      | 180                                                                                 | *                       | 01 - 6070DA        | - 731           | B-108                   | B-124        | B-143        |
|                                           | 60.0                                               | 6.12                         | 1660                                      | 169        | *           |                                                                                     | 60.0                                               | 6.12                                                                                | 1660                                      | 169                                                                                 | *                       | 01 - 6075DA        | - 731           | B-108                   | B-124        | B-143        |
|                                           | 150                                                | 15.3                         | 3310                                      | 338        | *           |                                                                                     | 150                                                | 15.3                                                                                | 3310                                      | 338                                                                                 | *                       | 01 - 6090DA        | - 731           | B-108                   | B-124        | B-143        |
|                                           | 200                                                | 20.4                         | 3220                                      | 328        | *           |                                                                                     | 200                                                | 20.4                                                                                | 3220                                      | 328                                                                                 | *                       | 01 - 6095DA        | - 731           | B-108                   | B-124        | B-143        |
|                                           | 250                                                | 25.5                         | 5400                                      | 550        | *           |                                                                                     | 250                                                | 25.5                                                                                | 5400                                      | 550                                                                                 | *                       | 01 - 6100DA        | - 731           | B-108                   | B-124        | B-143        |
|                                           | 300                                                | 30.6                         | 5400                                      | 550        | *           |                                                                                     | 300                                                | 30.6                                                                                | 5400                                      | 550                                                                                 | *                       | 01 - 6105DA        | - 731           | B-108                   | B-124        | B-143        |
|                                           | 433                                                | 44.2                         | 9810                                      | 1000       | 1.21        |                                                                                     | 359                                                | 36.6                                                                                | 9810                                      | 1000                                                                                | 1.46                    | 01 - 6120DA        | - 731           | B-108                   | B-124        | B-143        |
|                                           |                                                    |                              | 9810                                      | 1000       | 1.45        |                                                                                     |                                                    |                                                                                     | 9810                                      | 1000                                                                                | 1.75                    | 01 - 6125DA        | - 731           | B-108                   | B-124        | B-143        |

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

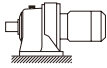
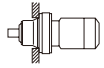
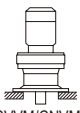




## Selection Tables Gearmotors

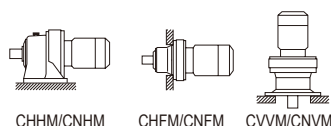
| 0.1 kW         |  | n <sub>1</sub> : Motor Speed |  |      |     |  CHHM/CNHM |      |  |  CHFM/CNFM |  |  |  CVVM/CNVVM |  |  |
|----------------|--|------------------------------|--|------|-----|-----------------------------------------------------------------------------------------------|------|--|-----------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------------------|--|--|
|                |  | Hz                           |  | 50Hz |     | 60Hz                                                                                          |      |  |                                                                                               |  |  |                                                                                                |  |  |
|                |  | P                            |  | 4    | 6   | 4                                                                                             | 6    |  |                                                                                               |  |  |                                                                                                |  |  |
| n <sub>1</sub> |  | r/min                        |  | 1450 | 980 | 1750                                                                                          | 1165 |  |                                                                                               |  |  |                                                                                                |  |  |

| 50Hz                           |                                   |                              |      |       | 60Hz                           |                                   |                              |      |       | Nomenclature            |            |                    | Page of Dimension Sheet |       |       |
|--------------------------------|-----------------------------------|------------------------------|------|-------|--------------------------------|-----------------------------------|------------------------------|------|-------|-------------------------|------------|--------------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |      | SF    | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |      | SF    | Input Capacity - Symbol | Frame Size | Reduction Ratio    | CNHM                    | CNFM  | CNVVM |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]  | [kgf] | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]  | [kgf] |                         |            |                    | CHHM                    | CHFM  | CVVM  |
| 0.476                          | 150                               | 15.3                         | 3310 | 338   | *                              | 0.575                             | 150                          | 15.3 | 3310  | 338                     | *          | 01 - 6090DA - 3045 | B-108                   | B-124 | B-143 |
|                                | 192                               | 19.6                         | 3240 | 330   | *                              |                                   | 192                          | 19.6 | 3240  | 330                     | *          | 01 - 6095DA - 3045 | B-108                   | B-124 | B-143 |
|                                | 250                               | 25.5                         | 5400 | 550   | *                              |                                   | 250                          | 25.5 | 5400  | 550                     | *          | 01 - 6100DA - 3045 | B-108                   | B-124 | B-143 |
|                                | 300                               | 30.6                         | 4780 | 488   | *                              |                                   | 300                          | 30.6 | 4780  | 488                     | *          | 01 - 6105DA - 3045 | B-108                   | B-124 | B-143 |
|                                | 525                               | 53.5                         | 9780 | 997   | *                              |                                   | 525                          | 53.5 | 9780  | 997                     | *          | 01 - 6120DA - 3045 | B-108                   | B-124 | B-143 |
|                                | 630                               | 64.2                         | 9560 | 974   | *                              |                                   | 630                          | 64.2 | 9560  | 974                     | *          | 01 - 6125DA - 3045 | B-108                   | B-124 | B-143 |
| 0.417                          | 146                               | 14.9                         | 3300 | 336   | *                              | 0.503                             | 146                          | 14.9 | 3300  | 336                     | *          | 01 - 6090DA - 3481 | B-108                   | B-124 | B-143 |
|                                | 250                               | 25.5                         | 5400 | 550   | *                              |                                   | 250                          | 25.5 | 5400  | 550                     | *          | 01 - 6100DA - 3481 | B-108                   | B-124 | B-143 |
|                                | 296                               | 30.2                         | 5090 | 519   | *                              |                                   | 296                          | 30.2 | 5090  | 519                     | *          | 01 - 6105DA - 3481 | B-108                   | B-124 | B-143 |
|                                | 525                               | 53.5                         | 9810 | 1000  | *                              |                                   | 525                          | 53.5 | 9810  | 1000                    | *          | 01 - 6120DA - 3481 | B-108                   | B-124 | B-143 |
|                                | 630                               | 64.2                         | 9810 | 1000  | *                              |                                   | 630                          | 64.2 | 9810  | 1000                    | *          | 01 - 6125DA - 3481 | B-108                   | B-124 | B-143 |
|                                |                                   |                              |      |       |                                |                                   |                              |      |       |                         |            |                    |                         |       |       |
| 0.327                          | 150                               | 15.3                         | 3310 | 338   | *                              | 0.394                             | 150                          | 15.3 | 3310  | 338                     | *          | 01 - 6090DA - 4437 | B-108                   | B-124 | B-143 |
|                                | 192                               | 19.6                         | 3240 | 330   | *                              |                                   | 192                          | 19.6 | 3240  | 330                     | *          | 01 - 6095DA - 4437 | B-108                   | B-124 | B-143 |
|                                | 250                               | 25.5                         | 5400 | 550   | *                              |                                   | 250                          | 25.5 | 5400  | 550                     | *          | 01 - 6100DA - 4437 | B-108                   | B-124 | B-143 |
|                                | 300                               | 30.6                         | 4780 | 488   | *                              |                                   | 300                          | 30.6 | 4780  | 488                     | *          | 01 - 6105DA - 4437 | B-108                   | B-124 | B-143 |
|                                | 525                               | 53.5                         | 9780 | 997   | *                              |                                   | 525                          | 53.5 | 9780  | 997                     | *          | 01 - 6120DA - 4437 | B-108                   | B-124 | B-143 |
|                                | 630                               | 64.2                         | 9560 | 974   | *                              |                                   | 630                          | 64.2 | 9560  | 974                     | *          | 01 - 6125DA - 4437 | B-108                   | B-124 | B-143 |
| 0.282                          | 150                               | 15.3                         | 3310 | 338   | *                              | 0.341                             | 150                          | 15.3 | 3310  | 338                     | *          | 01 - 6090DA - 5133 | B-108                   | B-124 | B-143 |
|                                | 192                               | 19.6                         | 3240 | 330   | *                              |                                   | 192                          | 19.6 | 3240  | 330                     | *          | 01 - 6095DA - 5133 | B-108                   | B-124 | B-143 |
|                                | 250                               | 25.5                         | 5400 | 550   | *                              |                                   | 250                          | 25.5 | 5400  | 550                     | *          | 01 - 6100DA - 5133 | B-108                   | B-124 | B-143 |
|                                | 300                               | 30.6                         | 4780 | 488   | *                              |                                   | 300                          | 30.6 | 4780  | 488                     | *          | 01 - 6105DA - 5133 | B-108                   | B-124 | B-143 |
|                                | 525                               | 53.5                         | 9780 | 997   | *                              |                                   | 525                          | 53.5 | 9780  | 997                     | *          | 01 - 6120DA - 5133 | B-108                   | B-124 | B-143 |
|                                | 630                               | 64.2                         | 9560 | 974   | *                              |                                   | 630                          | 64.2 | 9560  | 974                     | *          | 01 - 6125DA - 5133 | B-108                   | B-124 | B-143 |
| 0.235                          | 525                               | 53.5                         | 9780 | 997   | *                              | 0.283                             | 525                          | 53.5 | 9780  | 997                     | *          | 01 - 6120DB - 6177 | B-108                   | B-124 | B-143 |
|                                | 630                               | 64.2                         | 9560 | 974   | *                              |                                   | 630                          | 64.2 | 9560  | 974                     | *          | 01 - 6125DB - 6177 | B-108                   | B-124 | B-143 |
| 0.192                          | 525                               | 53.5                         | 9780 | 997   | *                              | 0.231                             | 525                          | 53.5 | 9780  | 997                     | *          | 01 - 6120DB - 7569 | B-108                   | B-124 | B-143 |
|                                | 630                               | 64.2                         | 9560 | 974   | *                              |                                   | 630                          | 64.2 | 9560  | 974                     | *          | 01 - 6125DB - 7569 | B-108                   | B-124 | B-143 |

| 0.2 kW                         |                                   | n <sub>1</sub> : Motor Speed |            |             |             |                                |                                   |  |            |             |  |                         |             |  |                         |              |              |
|--------------------------------|-----------------------------------|------------------------------|------------|-------------|-------------|--------------------------------|-----------------------------------|---------------------------------------------------------------------------------------|------------|-------------|---------------------------------------------------------------------------------------|-------------------------|-------------|---------------------------------------------------------------------------------------|-------------------------|--------------|--------------|
|                                |                                   | Hz                           |            | 50Hz        |             | 60Hz                           |                                   |                                                                                       |            |             |                                                                                       |                         |             |                                                                                       |                         |              |              |
|                                |                                   | P                            |            | 4           | 6           | 4                              | 6                                 |                                                                                       |            |             |                                                                                       |                         |             |                                                                                       |                         |              |              |
|                                |                                   | n <sub>1</sub>               | r/min      | 1450        | 980         | 1750                           | 1165                              |                                                                                       |            |             |                                                                                       |                         |             |                                                                                       |                         |              |              |
| 50Hz                           |                                   |                              |            |             |             | 60Hz                           |                                   |                                                                                       |            |             |                                                                                       | Nomenclature            |             |                                                                                       | Page of Dimension Sheet |              |              |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |            | SF          |             | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro                                                          |            | SF          |                                                                                       | Input Capacity - Symbol | Frame Size  | Reduction Ratio                                                                       | CNHM                    | CNFM         | CNVVM        |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]        | [kgf]       |             | [r/min]                        | [N·m]                             | [kgf·m]                                                                               | [N]        | [kgf]       |                                                                                       |                         |             |                                                                                       | CHHM                    | CHFM         | CVVM         |
| 242                            | 7.51                              | 0.765                        | <b>798</b> | <b>81.4</b> | <b>1.00</b> | 292                            | 6.22                              | 0.634                                                                                 | <b>751</b> | <b>76.6</b> | <b>1.00</b>                                                                           | <b>02 -</b>             | <b>6060</b> | <b>- 6</b>                                                                            | <b>B-100</b>            | <b>B-116</b> | <b>B-135</b> |
|                                |                                   |                              | 798        | 81.4        | 1.43        |                                |                                   |                                                                                       | 751        | 76.6        | 1.43                                                                                  | 02 -                    | 6065        | - 6                                                                                   | B-100                   | B-116        | B-135        |
|                                |                                   |                              | 1390       | 142         | 1.74        |                                |                                   |                                                                                       | 1310       | 134         | 1.74                                                                                  | 02 -                    | 6070        | - 6                                                                                   | B-100                   | B-116        | B-135        |
|                                |                                   |                              | 1390       | 142         | 2.04        |                                |                                   |                                                                                       | 1310       | 134         | 2.04                                                                                  | 02 -                    | 6075        | - 6                                                                                   | B-100                   | B-116        | B-135        |
|                                |                                   |                              | 1930       | 197         | 2.96        |                                |                                   |                                                                                       | 1820       | 185         | 2.96                                                                                  | 02 -                    | 6080        | - 6                                                                                   | B-100                   | B-116        | B-135        |
| 181                            | 10.0                              | 1.02                         | <b>912</b> | <b>93.0</b> | <b>1.00</b> | 219                            | 8.29                              | 0.846                                                                                 | <b>859</b> | <b>87.5</b> | <b>1.00</b>                                                                           | <b>02 -</b>             | <b>6060</b> | <b>- 8</b>                                                                            | <b>B-100</b>            | <b>B-116</b> | <b>B-135</b> |
|                                |                                   |                              | 912        | 93          | 1.43        |                                |                                   |                                                                                       | 859        | 88          | 1.43                                                                                  | 02 -                    | 6065        | - 8                                                                                   | B-100                   | B-116        | B-135        |
|                                |                                   |                              | 1540       | 157         | 1.74        |                                |                                   |                                                                                       | 1450       | 148         | 1.74                                                                                  | 02 -                    | 6070        | - 8                                                                                   | B-100                   | B-116        | B-135        |
|                                |                                   |                              | 1540       | 157         | 2.04        |                                |                                   |                                                                                       | 1450       | 148         | 2.04                                                                                  | 02 -                    | 6075        | - 8                                                                                   | B-100                   | B-116        | B-135        |
|                                |                                   |                              | 2100       | 214         | 2.96        |                                |                                   |                                                                                       | 1970       | 201         | 2.96                                                                                  | 02 -                    | 6080        | - 8                                                                                   | B-100                   | B-116        | B-135        |

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors

 $n_1$ : Motor Speed

0.2 kW

| Hz             |       | 50Hz |     | 60Hz |      |
|----------------|-------|------|-----|------|------|
| P              |       | 4    | 6   | 4    | 6    |
| n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

| 50Hz                           |                       |         |                              |       |      | 60Hz                           |                       |         |                              |       |      | Nomenclature             |            |                 | Page of Dimension Sheet |              |              |
|--------------------------------|-----------------------|---------|------------------------------|-------|------|--------------------------------|-----------------------|---------|------------------------------|-------|------|--------------------------|------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Input Capacity<br>Symbol | Frame Size | Reduction Ratio | CNHM<br>CHHM            | CNFM<br>CHFM | CNVM<br>CVVM |
| [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      | [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      |                          |            |                 |                         |              |              |
| 132                            | 13.8                  | 1.40    | 1180                         | 120   | 1.00 | 159                            | 11.4                  | 1.16    | 1170                         | 119   | 1.00 | 02 -                     | 6060       | - 11            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1180                         | 120   | 1.43 |                                |                       |         | 1170                         | 119   | 1.43 | 02 -                     | 6065       | - 11            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1730                         | 176   | 1.74 |                                |                       |         | 1630                         | 166   | 1.74 | 02 -                     | 6070       | - 11            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1730                         | 176   | 2.04 |                                |                       |         | 1630                         | 166   | 2.04 | 02 -                     | 6075       | - 11            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2320                         | 236   | 2.96 |                                |                       |         | 2180                         | 222   | 2.96 | 02 -                     | 6080       | - 11            | B-100                   | B-116        | B-135        |
| 112                            | 16.3                  | 1.66    | 1180                         | 120   | 1.00 | 135                            | 13.5                  | 1.37    | 1180                         | 120   | 1.00 | 02 -                     | 6060       | - 13            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1180                         | 120   | 1.43 |                                |                       |         | 1180                         | 120   | 1.43 | 02 -                     | 6065       | - 13            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 1.74 |                                |                       |         | 1720                         | 175   | 1.74 | 02 -                     | 6070       | - 13            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 2.04 |                                |                       |         | 1720                         | 175   | 2.04 | 02 -                     | 6075       | - 13            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2500                         | 254   | 2.96 |                                |                       |         | 2350                         | 239   | 2.96 | 02 -                     | 6080       | - 13            | B-100                   | B-116        | B-135        |
| 96.7                           | 18.8                  | 1.91    | 1180                         | 120   | 1.00 | 117                            | 15.6                  | 1.59    | 1180                         | 120   | 1.00 | 02 -                     | 6060       | - 15            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1180                         | 120   | 1.43 |                                |                       |         | 1180                         | 120   | 1.43 | 02 -                     | 6065       | - 15            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 1.74 |                                |                       |         | 1730                         | 176   | 1.74 | 02 -                     | 6070       | - 15            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 2.04 |                                |                       |         | 1730                         | 176   | 2.04 | 02 -                     | 6075       | - 15            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 2.96 |                                |                       |         | 2420                         | 247   | 2.96 | 02 -                     | 6080       | - 15            | B-100                   | B-116        | B-135        |
| 85.3                           | 21.3                  | 2.17    | 1180                         | 120   | 1.00 | 103                            | 17.6                  | 1.80    | 1180                         | 120   | 1.00 | 02 -                     | 6060       | - 17            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1180                         | 120   | 1.41 |                                |                       |         | 1180                         | 120   | 1.43 | 02 -                     | 6065       | - 17            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 1.74 |                                |                       |         | 1770                         | 180   | 1.74 | 02 -                     | 6070       | - 17            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 2.04 |                                |                       |         | 1770                         | 180   | 2.04 | 02 -                     | 6075       | - 17            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 2.96 |                                |                       |         | 2540                         | 259   | 2.96 | 02 -                     | 6080       | - 17            | B-100                   | B-116        | B-135        |
| 69.0                           | 26.3                  | 2.68    | 1180                         | 120   | 1.14 | 83.3                           | 21.8                  | 2.22    | 1180                         | 120   | 1.17 | 02 -                     | 6065       | - 21            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 1.60 |                                |                       |         | 1770                         | 180   | 1.60 | 02 -                     | 6070       | - 21            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 2.04 |                                |                       |         | 1770                         | 180   | 2.04 | 02 -                     | 6075       | - 21            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 2.39 |                                |                       |         | 2480                         | 253   | 2.39 | 02 -                     | 6080       | - 21            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 2.75 |                                |                       |         | 2480                         | 253   | 2.75 | 02 -                     | 6085       | - 21            | B-100                   | B-116        | B-135        |
| 58.0                           | 31.3                  | 3.19    | 1180                         | 120   | 0.83 | 70.0                           | 25.9                  | 2.64    | 1180                         | 120   | 0.83 | 02 -                     | 6065       | - 25            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 1.15 |                                |                       |         | 1770                         | 180   | 1.15 | 02 -                     | 6070       | - 25            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 1.47 |                                |                       |         | 1770                         | 180   | 1.47 | 02 -                     | 6075       | - 25            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 1.70 |                                |                       |         | 2550                         | 260   | 1.70 | 02 -                     | 6080       | - 25            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 2.38 |                                |                       |         | 2550                         | 260   | 2.38 | 02 -                     | 6085       | - 25            | B-100                   | B-116        | B-135        |
| 50.0                           | 36.3                  | 3.70    | 1180                         | 120   | 0.83 | 60.3                           | 30.1                  | 3.07    | 1180                         | 120   | 0.83 | 02 -                     | 6065       | - 29            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 1.13 |                                |                       |         | 1770                         | 180   | 1.13 | 02 -                     | 6070       | - 29            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 1.43 |                                |                       |         | 1770                         | 180   | 1.43 | 02 -                     | 6075       | - 29            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 1.70 |                                |                       |         | 2560                         | 261   | 1.70 | 02 -                     | 6080       | - 29            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 2.34 |                                |                       |         | 2560                         | 261   | 2.34 | 02 -                     | 6085       | - 29            | B-100                   | B-116        | B-135        |
| 41.4                           | 43.8                  | 4.46    | 1770                         | 180   | 1.03 | 50.0                           | 36.3                  | 3.70    | 1770                         | 180   | 1.06 | 02 -                     | 6070       | - 35            | B-100                   | B-116        | B-135        |
|                                |                       |         | 1770                         | 180   | 1.36 |                                |                       |         | 1770                         | 180   | 1.40 | 02 -                     | 6075       | - 35            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 1.45 |                                |                       |         | 2560                         | 261   | 1.65 | 02 -                     | 6080       | - 35            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 1.64 |                                |                       |         | 2560                         | 261   | 1.86 | 02 -                     | 6085       | - 35            | B-100                   | B-116        | B-135        |
|                                |                       |         | 3340                         | 340   | 3.06 |                                |                       |         | 3340                         | 340   | 3.06 | 02 -                     | 6090       | - 35            | B-100                   | B-116        | B-135        |
| 33.7                           | 53.8                  | 5.49    | 1770                         | 180   | 1.12 | 40.7                           | 44.6                  | 4.54    | 1770                         | 180   | 1.13 | 02 -                     | 6075       | - 43            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 1.25 |                                |                       |         | 2560                         | 261   | 1.25 | 02 -                     | 6080       | - 43            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 1.47 |                                |                       |         | 2560                         | 261   | 1.47 | 02 -                     | 6085       | - 43            | B-100                   | B-116        | B-135        |
|                                |                       |         | 3340                         | 340   | 2.18 |                                |                       |         | 3340                         | 340   | 2.18 | 02 -                     | 6090       | - 43            | B-100                   | B-116        | B-135        |
|                                |                       |         | 2560                         | 261   | 1.21 |                                |                       |         | 2560                         | 261   | 1.21 | 02 -                     | 6085       | - 51            | B-100                   | B-116        | B-135        |
| 28.4                           | 63.8                  | 6.51    | 3340                         | 340   | 1.66 | 34.3                           | 52.9                  | 5.39    | 3340                         | 340   | 1.66 | 02 -                     | 6090       | - 51            | B-100                   | B-116        | B-135        |
|                                |                       |         | 3340                         | 340   | 2.04 |                                |                       |         | 3340                         | 340   | 2.11 | 02 -                     | 6095       | - 51            | B-100                   | B-116        | B-135        |
|                                |                       |         | 5400                         | 550   | 2.80 |                                |                       |         | 5400                         | 550   | 2.80 | 02 -                     | 6100       | - 51            | B-101                   | B-117        | B-136        |
|                                |                       |         | 2560                         | 261   | 1.17 |                                |                       |         | 2560                         | 261   | 1.17 | 02 -                     | 6085       | - 59            | B-100                   | B-116        | B-135        |
|                                |                       |         | 3340                         | 340   | 1.55 |                                |                       |         | 3340                         | 340   | 1.55 | 02 -                     | 6090       | - 59            | B-100                   | B-116        | B-135        |
| 24.6                           | 73.8                  | 7.53    | 3340                         | 340   | 1.68 | 29.7                           | 61.2                  | 6.24    | 3340                         | 340   | 1.87 | 02 -                     | 6095       | - 59            | B-100                   | B-116        | B-135        |
|                                |                       |         | 5400                         | 550   | 2.58 |                                |                       |         | 5400                         | 550   | 2.58 | 02 -                     | 6100       | - 59            | B-101                   | B-117        | B-136        |
|                                |                       |         | 2380                         | 243   | 0.83 |                                |                       |         | 2510                         | 256   | 0.94 | 02 -                     | 6085       | - 71            | B-100                   | B-116        | B-135        |
|                                |                       |         | 3340                         | 340   | 1.26 |                                |                       |         | 3340                         | 340   | 1.26 | 02 -                     | 6090       | - 71            | B-100                   | B-116        | B-135        |
|                                |                       |         | 3340                         | 340   | 1.39 |                                |                       |         | 3340                         | 340   | 1.51 | 02 -                     | 6095       | - 71            | B-100                   | B-116        | B-135        |
| 20.4                           | 88.8                  | 9.06    | 5400                         | 550   | 2.18 | 24.6                           | 73.6                  | 7.50    | 5400                         | 550   | 2.18 | 02 -                     | 6100       | - 71            | B-101                   | B-117        | B-136        |
|                                |                       |         | 5400                         | 550   | 2.53 |                                |                       |         | 5400                         | 550   | 2.81 | 02 -                     | 6105       | - 71            | B-101                   | B-117        | B-136        |

GEARMOTORS

Selection Tables  
0.2 kW

6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

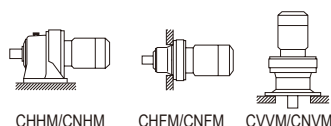








## Selection Tables Gearmotors



| 0.2 kW | n: Motor Speed |       |      |      |
|--------|----------------|-------|------|------|
|        | Hz             |       | 50Hz |      |
|        | P              |       | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980  |
|        |                |       | 1750 | 1165 |

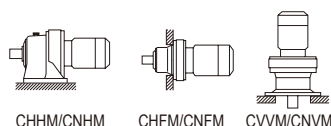
| 50Hz                           |                                   |                              |       |       |   | 60Hz                           |                                   |                              |       |       | Nomenclature |                         |            | Page of Dimension Sheet |       |       |       |
|--------------------------------|-----------------------------------|------------------------------|-------|-------|---|--------------------------------|-----------------------------------|------------------------------|-------|-------|--------------|-------------------------|------------|-------------------------|-------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |       | SF    |   | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |       | SF    |              | Input Capacity - Symbol | Frame Size | Reduction Ratio         | CNHM  | CNFM  | CNVVM |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]   | [kgf] |   | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]   | [kgf] |              |                         |            |                         | CHHM  | CHFM  | CVVM  |
| 0.327                          | 848                               | 86.5                         | 14700 | 1500  | * | 0.394                          | 848                               | 86.5                         | 14700 | 1500  | *            | 02 - 6130DA             | - 4437     |                         | B-109 | B-125 | B-144 |
|                                | 979                               | 99.8                         | 14700 | 1500  | * |                                | 979                               | 99.8                         | 14700 | 1500  | *            | 02 - 6135DA             | - 4437     |                         | B-109 | B-125 | B-144 |
|                                | 1230                              | 125                          | 16000 | 1630  | * |                                | 1230                              | 125                          | 16000 | 1630  | *            | 02 - 6140DA             | - 4437     |                         | B-109 | B-125 | B-144 |
|                                | 1250                              | 127                          | 16000 | 1630  | * |                                | 1250                              | 127                          | 16000 | 1630  | *            | 02 - 6145DA             | - 4437     |                         | B-109 | B-125 | B-144 |
|                                | 1760                              | 179                          | 22100 | 2250  | * |                                | 1760                              | 179                          | 22100 | 2250  | *            | 02 - 6160DA             | - 4437     |                         | B-110 | B-126 | B-145 |
|                                | 2050                              | 209                          | 21800 | 2220  | * |                                | 2050                              | 209                          | 21800 | 2220  | *            | 02 - 6165DA             | - 4437     |                         | B-110 | B-126 | B-145 |
|                                | 2530                              | 258                          | 29500 | 3010  | * |                                | 2530                              | 258                          | 29500 | 3010  | *            | 02 - 6170DA             | - 4437     |                         | B-110 | B-126 | B-145 |
|                                | 3150                              | 321                          | 29500 | 3010  | * |                                | 3150                              | 321                          | 29500 | 3010  | *            | 02 - 6175DA             | - 4437     |                         | B-110 | B-126 | B-145 |
| 0.282                          | 848                               | 86.5                         | 14700 | 1500  | * | 0.341                          | 848                               | 86.5                         | 14700 | 1500  | *            | 02 - 6130DA             | - 5133     |                         | B-109 | B-125 | B-144 |
|                                | 979                               | 99.8                         | 14700 | 1500  | * |                                | 979                               | 99.8                         | 14700 | 1500  | *            | 02 - 6135DA             | - 5133     |                         | B-109 | B-125 | B-144 |
|                                | 1230                              | 125                          | 16000 | 1630  | * |                                | 1230                              | 125                          | 16000 | 1630  | *            | 02 - 6140DA             | - 5133     |                         | B-109 | B-125 | B-144 |
|                                | 1250                              | 127                          | 16000 | 1630  | * |                                | 1250                              | 127                          | 16000 | 1630  | *            | 02 - 6145DA             | - 5133     |                         | B-109 | B-125 | B-144 |
|                                | 1760                              | 179                          | 22100 | 2250  | * |                                | 1760                              | 179                          | 22100 | 2250  | *            | 02 - 6160DA             | - 5133     |                         | B-110 | B-126 | B-145 |
|                                | 2050                              | 209                          | 21800 | 2220  | * |                                | 2050                              | 209                          | 21800 | 2220  | *            | 02 - 6165DA             | - 5133     |                         | B-110 | B-126 | B-145 |
|                                | 2530                              | 258                          | 29500 | 3010  | * |                                | 2530                              | 258                          | 29500 | 3010  | *            | 02 - 6170DA             | - 5133     |                         | B-110 | B-126 | B-145 |
|                                | 3150                              | 321                          | 29500 | 3010  | * |                                | 3150                              | 321                          | 29500 | 3010  | *            | 02 - 6175DA             | - 5133     |                         | B-110 | B-126 | B-145 |
| 0.235                          | 848                               | 86.5                         | 14700 | 1500  | * | 0.283                          | 848                               | 86.5                         | 14700 | 1500  | *            | 02 - 6130DB             | - 6177     |                         | B-109 | B-125 | B-143 |
|                                | 979                               | 99.8                         | 14700 | 1500  | * |                                | 979                               | 99.8                         | 14700 | 1500  | *            | 02 - 6135DB             | - 6177     |                         | B-109 | B-125 | B-144 |
|                                | 1230                              | 125                          | 16000 | 1630  | * |                                | 1230                              | 125                          | 16000 | 1630  | *            | 02 - 6140DB             | - 6177     |                         | B-109 | B-125 | B-144 |
|                                | 1250                              | 127                          | 16000 | 1630  | * |                                | 1250                              | 127                          | 16000 | 1630  | *            | 02 - 6145DB             | - 6177     |                         | B-109 | B-125 | B-144 |
|                                | 1760                              | 179                          | 22100 | 2250  | * |                                | 1760                              | 179                          | 22100 | 2250  | *            | 02 - 6160DA             | - 6177     |                         | B-110 | B-126 | B-145 |
|                                | 2050                              | 209                          | 21800 | 2220  | * |                                | 2050                              | 209                          | 21800 | 2220  | *            | 02 - 6165DA             | - 6177     |                         | B-110 | B-126 | B-145 |
|                                | 2530                              | 258                          | 29500 | 3010  | * |                                | 2530                              | 258                          | 29500 | 3010  | *            | 02 - 6170DA             | - 6177     |                         | B-110 | B-126 | B-145 |
|                                | 3150                              | 321                          | 29500 | 3010  | * |                                | 3150                              | 321                          | 29500 | 3010  | *            | 02 - 6175DA             | - 6177     |                         | B-110 | B-126 | B-145 |
| 0.192                          | 848                               | 86.5                         | 14700 | 1500  | * | 0.231                          | 848                               | 86.5                         | 14700 | 1500  | *            | 02 - 6130DB             | - 7569     |                         | B-109 | B-125 | B-143 |
|                                | 979                               | 99.8                         | 14700 | 1500  | * |                                | 979                               | 99.8                         | 14700 | 1500  | *            | 02 - 6135DB             | - 7569     |                         | B-109 | B-125 | B-144 |
|                                | 1230                              | 125                          | 16000 | 1630  | * |                                | 1230                              | 125                          | 16000 | 1630  | *            | 02 - 6140DB             | - 7569     |                         | B-109 | B-125 | B-144 |
|                                | 1250                              | 127                          | 16000 | 1630  | * |                                | 1250                              | 127                          | 16000 | 1630  | *            | 02 - 6145DB             | - 7569     |                         | B-109 | B-125 | B-144 |
|                                | 1760                              | 179                          | 22100 | 2250  | * |                                | 1760                              | 179                          | 22100 | 2250  | *            | 02 - 6160DA             | - 7569     |                         | B-110 | B-126 | B-145 |
|                                | 2050                              | 209                          | 21800 | 2220  | * |                                | 2050                              | 209                          | 21800 | 2220  | *            | 02 - 6165DA             | - 7569     |                         | B-110 | B-126 | B-145 |
|                                | 2530                              | 258                          | 29500 | 3010  | * |                                | 2530                              | 258                          | 29500 | 3010  | *            | 02 - 6170DA             | - 7569     |                         | B-110 | B-126 | B-145 |
|                                | 3150                              | 321                          | 29500 | 3010  | * |                                | 3150                              | 321                          | 29500 | 3010  | *            | 02 - 6175DA             | - 7569     |                         | B-110 | B-126 | B-145 |

6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.





## Selection Tables Gearmotors



|         |                |       |      |     |      |      |
|---------|----------------|-------|------|-----|------|------|
| 0.25 kW | Hz             |       | 50Hz |     | 60Hz |      |
|         | P              |       | 4    | 6   | 4    | 6    |
|         | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

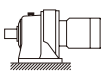
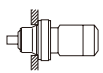
| 50Hz                           |                       |         |                              |       |      | 60Hz                           |                       |         |                              |       |      | Nomenclature               |            |                 | Page of Dimension Sheet |       |       |             |   |     |       |       |       |
|--------------------------------|-----------------------|---------|------------------------------|-------|------|--------------------------------|-----------------------|---------|------------------------------|-------|------|----------------------------|------------|-----------------|-------------------------|-------|-------|-------------|---|-----|-------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Input Capacity -<br>Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVN  |             |   |     |       |       |       |
| [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      | [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      |                            |            |                 | CHHM                    | CHFM  | CVVM  |             |   |     |       |       |       |
| 20.4                           | 111                   | 11.3    | 3340                         | 340   | 1.01 | 24.6                           | 92                    | 9.4     | 3340                         | 340   | 1.01 | 03 - 6090                  | -          | 71              | B-100                   | B-116 | B-135 |             |   |     |       |       |       |
|                                |                       |         | 3340                         | 340   | 1.11 |                                |                       |         | 3340                         | 340   | 1.20 |                            |            |                 |                         |       |       | 03 - 6095   | - | 71  | B-100 | B-116 | B-135 |
|                                |                       |         | 5400                         | 550   | 1.74 |                                |                       |         | 5400                         | 550   | 1.74 |                            |            |                 |                         |       |       | 03 - 6100   | - | 71  | B-101 | B-117 | B-136 |
|                                |                       |         | 5400                         | 550   | 2.02 |                                |                       |         | 5400                         | 550   | 2.24 |                            |            |                 |                         |       |       | 03 - 6105   | - | 71  | B-101 | B-117 | B-136 |
| 16.7                           | 136                   | 13.9    | 3340                         | 340   | 1.05 | 20.1                           | 113                   | 11.5    | 3340                         | 340   | 1.20 | 03 - 6095                  | -          | 87              | B-100                   | B-116 | B-135 |             |   |     |       |       |       |
|                                |                       |         | 5400                         | 550   | 1.73 |                                |                       |         | 5400                         | 550   | 1.73 |                            |            |                 |                         |       |       | 03 - 6100   | - | 87  | B-101 | B-117 | B-136 |
|                                |                       |         | 5400                         | 550   | 2.01 |                                |                       |         | 5400                         | 550   | 2.26 |                            |            |                 |                         |       |       | 03 - 6105   | - | 87  | B-101 | B-117 | B-136 |
|                                |                       |         | 3340                         | 340   | 1.17 |                                |                       |         | 3340                         | 340   | 1.42 |                            |            |                 |                         |       |       | 03 - 6095DA | - | 104 | B-108 | B-124 | B-143 |
| 13.9                           | 154                   | 15.7    | 5400                         | 550   | 1.62 | 16.8                           | 128                   | 13.0    | 5400                         | 550   | 1.63 | 03 - 6100DA                | -          | 104             | B-108                   | B-124 | B-143 |             |   |     |       |       |       |
|                                |                       |         | 5400                         | 550   | 1.63 |                                |                       |         | 5400                         | 550   | 1.63 |                            |            |                 |                         |       |       | 03 - 6105DA | - | 104 | B-108 | B-124 | B-143 |
|                                |                       |         | 5400                         | 550   | 1.63 |                                |                       |         | 5400                         | 550   | 1.63 |                            |            |                 |                         |       |       | 03 - 6105DA | - | 104 | B-108 | B-124 | B-143 |
|                                |                       |         | 5400                         | 550   | 1.63 |                                |                       |         | 5400                         | 550   | 1.63 |                            |            |                 |                         |       |       | 03 - 6105DA | - | 104 | B-108 | B-124 | B-143 |
| 12.2                           | 186                   | 19.0    | 5400                         | 550   | 1.14 | 14.7                           | 154                   | 15.7    | 5400                         | 550   | 1.14 | 03 - 6105                  | -          | 119             | B-101                   | B-117 | B-136 |             |   |     |       |       |       |
| 12.0                           | 179                   | 18.3    | 3340                         | 340   | 0.89 | 14.5                           | 149                   | 15.1    | 3340                         | 340   | 1.08 | 03 - 6095DA                | -          | 121             | B-108                   | B-124 | B-143 |             |   |     |       |       |       |
|                                |                       |         | 5400                         | 550   | 1.39 |                                |                       |         | 5400                         | 550   | 1.63 |                            |            |                 |                         |       |       | 03 - 6100DA | - | 121 | B-108 | B-124 | B-143 |
|                                |                       |         | 5400                         | 550   | 1.63 |                                |                       |         | 5400                         | 550   | 1.63 |                            |            |                 |                         |       |       | 03 - 6105DA | - | 121 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 2.93 |                                |                       |         | 9810                         | 1000  | 3.53 |                            |            |                 |                         |       |       | 03 - 6120DB | - | 121 | B-108 | B-124 | B-143 |
| 10.1                           | 212                   | 21.6    | 3340                         | 340   | *    | 12.2                           | 176                   | 17.9    | 3340                         | 340   | *    | 03 - 6090DA                | -          | 143             | B-108                   | B-124 | B-143 |             |   |     |       |       |       |
|                                |                       |         | 3340                         | 340   | 0.87 |                                |                       |         | 3340                         | 340   | 1.04 |                            |            |                 |                         |       |       | 03 - 6095DA | - | 143 | B-108 | B-124 | B-143 |
|                                |                       |         | 5400                         | 550   | 1.18 |                                |                       |         | 5400                         | 550   | 1.42 |                            |            |                 |                         |       |       | 03 - 6100DA | - | 143 | B-108 | B-124 | B-143 |
|                                |                       |         | 5400                         | 550   | 1.42 |                                |                       |         | 5400                         | 550   | 1.63 |                            |            |                 |                         |       |       | 03 - 6105DA | - | 143 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 1.63 |                                |                       |         | 9810                         | 1000  | 1.63 |                            |            |                 |                         |       |       | 03 - 6120DA | - | 143 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 2.48 |                                |                       |         | 9810                         | 1000  | 2.99 |                            |            |                 |                         |       |       | 03 - 6120DB | - | 143 | B-108 | B-124 | B-143 |
| 8.79                           | 245                   | 24.9    | 9810                         | 1000  | 2.48 | 10.6                           | 203                   | 20.7    | 9810                         | 1000  | 2.99 | 03 - 6120DA                | -          | 165             | B-108                   | B-124 | B-143 |             |   |     |       |       |       |
|                                |                       |         | 9810                         | 1000  | 2.97 |                                |                       |         | 9810                         | 1000  | 3.59 |                            |            |                 |                         |       |       | 03 - 6120DB | - | 165 | B-108 | B-124 | B-143 |
|                                |                       |         | 3340                         | 340   | *    |                                |                       |         | 3340                         | 340   | *    |                            |            |                 |                         |       |       | 03 - 6095DA | - | 165 | B-108 | B-124 | B-143 |
|                                |                       |         | 3340                         | 340   | 0.82 |                                |                       |         | 3340                         | 340   | 0.98 |                            |            |                 |                         |       |       | 03 - 6095DA | - | 165 | B-108 | B-124 | B-143 |
|                                |                       |         | 5400                         | 550   | 1.02 |                                |                       |         | 5400                         | 550   | 1.23 |                            |            |                 |                         |       |       | 03 - 6100DA | - | 165 | B-108 | B-124 | B-143 |
|                                |                       |         | 5400                         | 550   | 1.23 |                                |                       |         | 5400                         | 550   | 1.48 |                            |            |                 |                         |       |       | 03 - 6105DA | - | 165 | B-108 | B-124 | B-143 |
| 7.44                           | 289                   | 29.5    | 9810                         | 1000  | 1.63 | 8.97                           | 239                   | 24.4    | 9810                         | 1000  | 1.63 | 03 - 6120DA                | -          | 165             | B-108                   | B-124 | B-143 |             |   |     |       |       |       |
|                                |                       |         | 9810                         | 1000  | 2.15 |                                |                       |         | 9810                         | 1000  | 1.63 |                            |            |                 |                         |       |       | 03 - 6120DA | - | 165 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 2.15 |                                |                       |         | 9810                         | 1000  | 2.59 |                            |            |                 |                         |       |       | 03 - 6120DB | - | 165 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 2.58 |                                |                       |         | 9810                         | 1000  | 2.59 |                            |            |                 |                         |       |       | 03 - 6120DB | - | 165 | B-108 | B-124 | B-143 |
|                                |                       |         | 3340                         | 340   | *    |                                |                       |         | 3340                         | 340   | *    |                            |            |                 |                         |       |       | 03 - 6095DA | - | 195 | B-108 | B-124 | B-143 |
|                                |                       |         | 5400                         | 550   | 1.04 |                                |                       |         | 5400                         | 550   | 1.25 |                            |            |                 |                         |       |       | 03 - 6105DA | - | 195 | B-108 | B-124 | B-143 |
| 6.28                           | 342                   | 34.9    | 9810                         | 1000  | 1.63 | 7.58                           | 284                   | 28.9    | 9810                         | 1000  | 1.63 | 03 - 6120DA                | -          | 231             | B-108                   | B-124 | B-143 |             |   |     |       |       |       |
|                                |                       |         | 9810                         | 1000  | 1.82 |                                |                       |         | 9810                         | 1000  | 2.19 |                            |            |                 |                         |       |       | 03 - 6120DA | - | 231 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 2.18 |                                |                       |         | 9810                         | 1000  | 2.19 |                            |            |                 |                         |       |       | 03 - 6120DB | - | 195 | B-108 | B-124 | B-143 |
|                                |                       |         | 14700                        | 1500  | 2.70 |                                |                       |         | 9810                         | 1000  | 2.63 |                            |            |                 |                         |       |       | 03 - 6120DB | - | 195 | B-108 | B-124 | B-143 |
|                                |                       |         | 5400                         | 550   | *    |                                |                       |         | 5400                         | 550   | *    |                            |            |                 |                         |       |       | 03 - 6125DB | - | 195 | B-108 | B-124 | B-143 |
|                                |                       |         | 4940                         | 504   | 0.88 |                                |                       |         | 14700                        | 1500  | 3.26 |                            |            |                 |                         |       |       | 03 - 6130DB | - | 195 | B-109 | B-125 | B-144 |
| 5.31                           | 405                   | 41.2    | 5400                         | 550   | *    | 6.41                           | 335                   | 34.2    | 5400                         | 550   | *    | 03 - 6095DA                | -          | 231             | B-108                   | B-124 | B-143 |             |   |     |       |       |       |
|                                |                       |         | 4940                         | 504   | 0.88 |                                |                       |         | 5400                         | 550   | 1.06 |                            |            |                 |                         |       |       | 03 - 6105DA | - | 231 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 1.52 |                                |                       |         | 9810                         | 1000  | 1.63 |                            |            |                 |                         |       |       | 03 - 6120DA | - | 231 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 1.52 |                                |                       |         | 9810                         | 1000  | 1.84 |                            |            |                 |                         |       |       | 03 - 6120DB | - | 231 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 1.63 |                                |                       |         | 9810                         | 1000  | 1.63 |                            |            |                 |                         |       |       | 03 - 6125DA | - | 231 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 1.84 |                                |                       |         | 9810                         | 1000  | 2.22 |                            |            |                 |                         |       |       | 03 - 6125DB | - | 231 | B-108 | B-124 | B-143 |
| 5.31                           | 405                   | 41.2    | 14700                        | 1500  | 2.28 | 6.41                           | 335                   | 34.2    | 14700                        | 1500  | 2.22 | 03 - 6125DB                | -          | 231             | B-108                   | B-124 | B-143 |             |   |     |       |       |       |
|                                |                       |         | 14700                        | 1500  | 2.75 |                                |                       |         | 14700                        | 1500  | 2.75 |                            |            |                 |                         |       |       | 03 - 6130DB | - | 231 | B-109 | B-125 | B-144 |
|                                |                       |         | 14700                        | 1500  | 2.75 |                                |                       |         | 14700                        | 1500  | 3.31 |                            |            |                 |                         |       |       | 03 - 6135DB | - | 231 | B-109 | B-125 | B-144 |
|                                |                       |         | 5400                         | 550   | *    |                                |                       |         | 5400                         | 550   | *    |                            |            |                 |                         |       |       | 03 - 6105DA | - | 273 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 1.29 |                                |                       |         | 9810                         | 1000  | 1.56 |                            |            |                 |                         |       |       | 03 - 6120DA | - | 273 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000  | 1.56 |                                |                       |         | 9810                         | 1000  | 1.63 |                            |            |                 |                         |       |       | 03 - 6125DA | - | 273 | B-108 | B-124 | B-143 |
| 5.31                           | 405                   | 41.2    | 9810                         | 1000  | 1.56 | 6.41                           | 335                   | 34.2    | 9810                         | 1000  | 1.88 | 03 - 6125DB                | -          | 273             | B-108                   | B-124 | B-143 |             |   |     |       |       |       |
|                                |                       |         | 14700                        | 1500  | 1.63 |                                |                       |         | 14700                        | 1500  | 1.63 |                            |            |                 |                         |       |       | 03 - 6130DA | - | 273 | B-109 | B-125 | B-144 |
|                                |                       |         | 14700                        | 1500  | 1.93 |                                |                       |         | 14700                        | 1500  | 2.33 |                            |            |                 |                         |       |       | 03 - 6130DB | - | 273 | B-109 | B-125 | B-144 |
|                                |                       |         | 14700                        | 1500  | 2.32 |                                |                       |         | 14700                        | 1500  | 2.80 |                            |            |                 |                         |       |       | 03 - 6135DB | - | 273 | B-109 | B-125 | B-144 |
|                                |                       |         | 14700                        | 1500  | 2.32 |                                |                       |         | 14700                        | 1500  | 2.80 |                            |            |                 |                         |       |       | 03 - 6135DB | - | 273 | B-109 | B-125 | B-144 |
|                                |                       |         | 14700                        | 1500  | 2.32 |                                |                       |         | 14700                        | 1500  | 2.80 |                            |            |                 |                         |       |       | 03 - 6135DB | - | 273 | B-109 | B-125 | B-144 |

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.



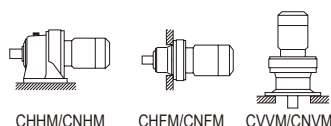


## Selection Tables Gearmotors

| 0.4 kW                         |                                   | n <sub>1</sub> : Motor Speed |       |       |      |                                |                                   |  |       |       |  |                         |            |  |                         |       |       |
|--------------------------------|-----------------------------------|------------------------------|-------|-------|------|--------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|-------|-------|-------------------------------------------------------------------------------------|-------------------------|------------|-------------------------------------------------------------------------------------|-------------------------|-------|-------|
|                                |                                   | Hz                           |       | 50Hz  |      | 60Hz                           |                                   |                                                                                     |       |       |                                                                                     |                         |            |                                                                                     |                         |       |       |
|                                |                                   | P                            |       | 4     | 6    | 4                              | 6                                 |                                                                                     |       |       |                                                                                     |                         |            |                                                                                     |                         |       |       |
|                                |                                   | n <sub>1</sub>               | r/min | 1450  | 980  | 1750                           | 1165                              |                                                                                     |       |       |                                                                                     |                         |            |                                                                                     |                         |       |       |
| 50Hz                           |                                   |                              |       |       |      | 60Hz                           |                                   |                                                                                     |       |       |                                                                                     | Nomenclature            |            |                                                                                     | Page of Dimension Sheet |       |       |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |       | SF    |      | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro                                                        |       | SF    |                                                                                     | Input Capacity - Symbol | Frame Size | Reduction Ratio                                                                     | CNHN                    | CNFM  | CNVM  |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]   | [kgf] |      | [r/min]                        | [N·m]                             | [kgf·m]                                                                             | [N]   | [kgf] |                                                                                     |                         |            |                                                                                     | CHHM                    | CHFM  | CVVM  |
| 58.0                           | 62.6                              | 6.38                         | 2560  | 261   | 1.19 | 70.0                           | 51.8                              | 5.28                                                                                | 2520  | 256   | 1.19                                                                                | 05 - 6085               | - 25       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 3340  | 340   | 1.68 |                                |                                   |                                                                                     | 3340  | 340   | 1.68                                                                                | 05 - 6090               | - 25       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 3340  | 340   | 2.17 |                                |                                   |                                                                                     | 3340  | 340   | 2.17                                                                                | 05 - 6095               | - 25       |                                                                                     | B-100                   | B-116 | B-135 |
| 50.0                           | 72.6                              | 7.40                         | 2560  | 261   | 1.17 | 60.3                           | 60.1                              | 6.13                                                                                | 2560  | 261   | 1.17                                                                                | 05 - 6085               | - 29       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 3340  | 340   | 1.56 |                                |                                   |                                                                                     | 3340  | 340   | 1.56                                                                                | 05 - 6090               | - 29       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 3340  | 340   | 1.96 |                                |                                   |                                                                                     | 3340  | 340   | 1.96                                                                                | 05 - 6095               | - 29       |                                                                                     | B-100                   | B-116 | B-135 |
| 41.4                           | 87.6                              | 8.93                         | 2560  | 261   | 0.82 | 50.0                           | 72.6                              | 7.40                                                                                | 2560  | 261   | 0.93                                                                                | 05 - 6085               | - 35       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 3340  | 340   | 1.53 |                                |                                   |                                                                                     | 3340  | 340   | 1.53                                                                                | 05 - 6090               | - 35       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 3340  | 340   | 1.90 |                                |                                   |                                                                                     | 3340  | 340   | 1.90                                                                                | 05 - 6095               | - 35       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 5400  | 550   | 2.44 |                                |                                   |                                                                                     | 5400  | 550   | 2.44                                                                                | 05 - 6100               | - 35       |                                                                                     | B-101                   | B-117 | B-136 |
| 33.7                           | 108                               | 11.0                         | 5400  | 550   | 3.00 | 40.7                           | 89.2                              | 9.09                                                                                | 5400  | 550   | 3.00                                                                                | 05 - 6105               | - 35       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 3340  | 340   | 1.09 |                                |                                   |                                                                                     | 3340  | 340   | 1.09                                                                                | 05 - 6090               | - 43       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 3340  | 340   | 1.51 |                                |                                   |                                                                                     | 3340  | 340   | 1.51                                                                                | 05 - 6095               | - 43       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 5400  | 550   | 1.95 |                                |                                   |                                                                                     | 5400  | 550   | 1.95                                                                                | 05 - 6100               | - 43       |                                                                                     | B-101                   | B-117 | B-136 |
| 28.4                           | 128                               | 13.0                         | 5400  | 550   | 2.70 | 34.3                           | 106                               | 10.8                                                                                | 5400  | 550   | 2.70                                                                                | 05 - 6105               | - 43       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 3320  | 339   | 1.02 |                                |                                   |                                                                                     | 3340  | 340   | 1.06                                                                                | 05 - 6095               | - 51       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 5400  | 550   | 1.40 |                                |                                   |                                                                                     | 5400  | 550   | 1.40                                                                                | 05 - 6100               | - 51       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 5400  | 550   | 1.94 |                                |                                   |                                                                                     | 5400  | 550   | 1.94                                                                                | 05 - 6105               | - 51       |                                                                                     | B-101                   | B-117 | B-136 |
| 24.6                           | 148                               | 15.1                         | 7610  | 776   | 2.36 | 29.7                           | 122                               | 12.5                                                                                | 7610  | 776   | 2.36                                                                                | 05 - 6110               | - 51       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 7610  | 776   | 2.78 |                                |                                   |                                                                                     | 7610  | 776   | 2.78                                                                                | 05 - 6115               | - 51       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 3300  | 336   | 0.84 |                                |                                   |                                                                                     | 3340  | 340   | 0.93                                                                                | 05 - 6095               | - 59       |                                                                                     | B-100                   | B-116 | B-135 |
|                                |                                   |                              | 5400  | 550   | 1.29 |                                |                                   |                                                                                     | 5400  | 550   | 1.29                                                                                | 05 - 6100               | - 59       |                                                                                     | B-101                   | B-117 | B-136 |
| 20.4                           | 178                               | 18.1                         | 5400  | 550   | 1.70 | 24.6                           | 147                               | 15.0                                                                                | 5400  | 550   | 1.77                                                                                | 05 - 6105               | - 59       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 7610  | 776   | 2.15 |                                |                                   |                                                                                     | 7610  | 776   | 2.15                                                                                | 05 - 6110               | - 59       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 7610  | 776   | 2.53 |                                |                                   |                                                                                     | 7610  | 776   | 2.53                                                                                | 05 - 6115               | - 59       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 5400  | 550   | 1.09 |                                |                                   |                                                                                     | 5400  | 550   | 1.09                                                                                | 05 - 6100               | - 71       |                                                                                     | B-101                   | B-117 | B-136 |
| 16.7                           | 218                               | 22.2                         | 5400  | 550   | 1.27 | 20.1                           | 180                               | 18.4                                                                                | 5400  | 550   | 1.40                                                                                | 05 - 6105               | - 71       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 7610  | 776   | 1.67 |                                |                                   |                                                                                     | 7610  | 776   | 1.67                                                                                | 05 - 6110               | - 71       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 7610  | 776   | 1.90 |                                |                                   |                                                                                     | 7610  | 776   | 1.90                                                                                | 05 - 6115               | - 71       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 9810  | 1000  | 2.39 |                                |                                   |                                                                                     | 9810  | 1000  | 2.39                                                                                | 05 - 6120               | - 71       |                                                                                     | B-101                   | B-117 | B-136 |
| 13.9                           | 150                               | 15.3                         | 9810  | 1000  | 2.85 | 16.8                           | 150                               | 15.3                                                                                | 9810  | 1000  | 3.00                                                                                | 05 - 6125               | - 71       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 5400  | 550   | 1.08 |                                |                                   |                                                                                     | 5400  | 550   | 1.08                                                                                | 05 - 6100               | - 87       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 5400  | 550   | 1.26 |                                |                                   |                                                                                     | 5400  | 550   | 1.41                                                                                | 05 - 6105               | - 87       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 7610  | 776   | 1.65 |                                |                                   |                                                                                     | 7610  | 776   | 1.65                                                                                | 05 - 6110               | - 87       |                                                                                     | B-101                   | B-117 | B-136 |
| 12.0                           | 160                               | 16.4                         | 7610  | 776   | 1.90 | 14.5                           | 160                               | 16.4                                                                                | 7610  | 776   | 1.90                                                                                | 05 - 6115               | - 87       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 9810  | 1000  | 2.36 |                                |                                   |                                                                                     | 9810  | 1000  | 2.36                                                                                | 05 - 6120               | - 87       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 9810  | 1000  | 2.58 |                                |                                   |                                                                                     | 9810  | 1000  | 2.83                                                                                | 05 - 6125               | - 87       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 5400  | 550   | 1.07 |                                |                                   |                                                                                     | 5400  | 550   | 1.02                                                                                | 05 - 6105DA             | - 104      |                                                                                     | B-108                   | B-124 | B-143 |
| 13.9                           | 181                               | 18.4                         | 5400  | 550   | 1.01 | 16.8                           | 181                               | 18.4                                                                                | 5400  | 550   | 1.02                                                                                | 05 - 6095DA             | - 104      |                                                                                     | B-108                   | B-124 | B-143 |
|                                |                                   |                              | 5400  | 550   | 1.07 |                                |                                   |                                                                                     | 5400  | 550   | 1.07                                                                                | 05 - 6105DA             | - 104      |                                                                                     | B-108                   | B-124 | B-143 |
|                                |                                   |                              | 9810  | 1000  | 2.13 |                                |                                   |                                                                                     | 9810  | 1000  | 2.57                                                                                | 05 - 6120DB             | - 104      |                                                                                     | B-108                   | B-124 | B-143 |
|                                |                                   |                              | 9810  | 1000  | 2.55 |                                |                                   |                                                                                     | 9810  | 1000  | 3.08                                                                                | 05 - 6125DB             | - 104      |                                                                                     | B-108                   | B-124 | B-143 |
| 12.0                           | 150                               | 15.3                         | 5400  | 550   | 1.07 | 14.5                           | 150                               | 15.3                                                                                | 5400  | 550   | 1.02                                                                                | 05 - 6090DA             | - 121      |                                                                                     | B-108                   | B-124 | B-143 |
|                                |                                   |                              | 5400  | 550   | 1.26 |                                |                                   |                                                                                     | 5400  | 550   | 1.41                                                                                | 05 - 6095DA             | - 121      |                                                                                     | B-108                   | B-124 | B-143 |
|                                |                                   |                              | 7610  | 776   | 1.65 |                                |                                   |                                                                                     | 7610  | 776   | 1.65                                                                                | 05 - 6105DA             | - 121      |                                                                                     | B-108                   | B-124 | B-143 |
|                                |                                   |                              | 7610  | 776   | 1.90 |                                |                                   |                                                                                     | 7610  | 776   | 1.90                                                                                | 05 - 6115               | - 87       |                                                                                     | B-101                   | B-117 | B-136 |
| 12.0                           | 160                               | 16.4                         | 9810  | 1000  | 2.36 | 14.5                           | 160                               | 16.4                                                                                | 9810  | 1000  | 2.36                                                                                | 05 - 6120               | - 87       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 9810  | 1000  | 2.58 |                                |                                   |                                                                                     | 9810  | 1000  | 2.83                                                                                | 05 - 6125               | - 87       |                                                                                     | B-101                   | B-117 | B-136 |
|                                |                                   |                              | 5400  | 550   | 1.07 |                                |                                   |                                                                                     | 5400  | 550   | 1.02                                                                                | 05 - 6105DA             | - 121      |                                                                                     | B-108                   | B-124 | B-143 |
|                                |                                   |                              | 9810  | 1000  | 1.83 |                                |                                   |                                                                                     | 9810  | 1000  | 2.21                                                                                | 05 - 6120DB             | - 121      |                                                                                     | B-108                   | B-124 | B-143 |
| 12.0                           | 287                               | 29.2                         | 9810  | 1000  | 2.17 | 14.5                           | 238                               | 24.2                                                                                | 9810  | 1000  | 2.62                                                                                | 05 - 6125DB             | - 121      |                                                                                     | B-108                   | B-124 | B-143 |
|                                |                                   |                              | 14700 | 1500  | 2.72 |                                |                                   |                                                                                     | 14700 | 1500  | 3.28                                                                                | 05 - 6130DB             | - 121      |                                                                                     | B-109                   | B-125 | B-144 |
|                                |                                   |                              | 5400  | 550   | 1.07 |                                |                                   |                                                                                     | 5400  | 550   | 1.02                                                                                | 05 - 6105DA             | - 121      |                                                                                     | B-108                   | B-124 | B-143 |
|                                |                                   |                              | 9810  | 1000  | 1.83 |                                |                                   |                                                                                     | 9810  | 1000  | 2.21                                                                                | 05 - 6120DB             | - 121      |                                                                                     | B-108                   | B-124 | B-143 |

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors



0.4 kW

n: Motor Speed

| Hz             |       | 50Hz |     | 60Hz |      |
|----------------|-------|------|-----|------|------|
| P              |       | 4    | 6   | 4    | 6    |
| n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

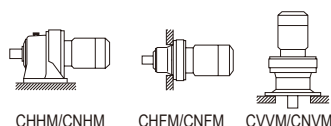
| 50Hz                                      |                                        |                                           |              |             |             | 60Hz                                      |                                        |                                           |              | Nomenclature |             |                         | Page of Dimension Sheet |                 |                                  |
|-------------------------------------------|----------------------------------------|-------------------------------------------|--------------|-------------|-------------|-------------------------------------------|----------------------------------------|-------------------------------------------|--------------|--------------|-------------|-------------------------|-------------------------|-----------------|----------------------------------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] |              | SF          |             | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] |              | SF           |             | Input Capacity - Symbol | Frame Size              | Reduction Ratio | CNHM CNFM CNVM<br>CHHM CHFM CVVM |
| 10.1                                      | 183                                    | 18.7                                      | 3340         | 340         | *           | 12.2                                      | 183                                    | 18.7                                      | 3340         | 340          | *           | 05 - 6095DA             | - 143                   | - 143           | B-108 B-124 B-143                |
|                                           | 250                                    | 25.5                                      | 5400         | 550         | *           |                                           | 250                                    | 25.5                                      | 5400         | 550          | *           | 05 - 6100DA             | - 143                   | - 143           | B-108 B-124 B-143                |
|                                           |                                        |                                           | 5400         | 550         | 0.88        |                                           |                                        |                                           | 5400         | 550          | 1.02        | 05 - 6105DA             | - 143                   | - 143           | B-108 B-124 B-143                |
|                                           |                                        |                                           | <b>9810</b>  | <b>1000</b> | <b>1.02</b> |                                           |                                        |                                           | <b>9810</b>  | <b>1000</b>  | <b>1.02</b> | <b>05 - 6120DA</b>      | <b>- 143</b>            | <b>- 143</b>    | <b>B-108 B-124 B-143</b>         |
|                                           |                                        |                                           | 9810         | 1000        | 1.55        |                                           |                                        |                                           | 9810         | 1000         | 1.87        | 05 - 6120DB             | - 143                   | - 143           | B-108 B-124 B-143                |
|                                           | 339                                    | 34.6                                      | 9810         | 1000        | 1.86        |                                           | 281                                    | 28.6                                      | 9810         | 1000         | 2.24        | 05 - 6125DB             | - 143                   | - 143           | B-108 B-124 B-143                |
|                                           |                                        |                                           | 14700        | 1500        | 2.30        |                                           |                                        |                                           | 14700        | 1500         | 2.78        | 05 - 6130DB             | - 143                   | - 143           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 14700        | 1500        | 2.77        |                                           |                                        |                                           | 14700        | 1500         | 3.35        | 05 - 6135DB             | - 143                   | - 143           | B-109 B-125 B-144                |
| 8.79                                      | 250                                    | 25.5                                      | 5400         | 550         | *           | 10.6                                      | 250                                    | 25.5                                      | 5400         | 550          | *           | 05 - 6100DA             | - 165                   | - 165           | B-108 B-124 B-143                |
|                                           | 300                                    | 30.6                                      | 5400         | 550         | *           |                                           | 300                                    | 30.6                                      | 5400         | 550          | *           | 05 - 6105DA             | - 165                   | - 165           | B-108 B-124 B-143                |
|                                           |                                        |                                           | <b>9810</b>  | <b>1000</b> | <b>1.02</b> |                                           |                                        |                                           | <b>9810</b>  | <b>1000</b>  | <b>1.02</b> | <b>05 - 6120DA</b>      | <b>- 165</b>            | <b>- 165</b>    | <b>B-108 B-124 B-143</b>         |
|                                           |                                        |                                           | 9810         | 1000        | 1.34        |                                           |                                        |                                           | 9810         | 1000         | 1.62        | 05 - 6120DB             | - 165                   | - 165           | B-108 B-124 B-143                |
|                                           | 391                                    | 39.9                                      | 9810         | 1000        | 1.61        |                                           | 324                                    | 33.0                                      | 9810         | 1000         | 1.94        | 05 - 6125DB             | - 165                   | - 165           | B-108 B-124 B-143                |
|                                           |                                        |                                           | 14700        | 1500        | 1.99        |                                           |                                        |                                           | 14700        | 1500         | 2.41        | 05 - 6130DB             | - 165                   | - 165           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 14700        | 1500        | 2.40        |                                           |                                        |                                           | 14700        | 1500         | 2.90        | 05 - 6135DB             | - 165                   | - 165           | B-109 B-125 B-144                |
|                                           |                                        |                                           |              |             |             |                                           |                                        |                                           |              |              |             |                         |                         |                 |                                  |
| 7.44                                      | 250                                    | 25.5                                      | 5400         | 550         | *           | 8.97                                      | 250                                    | 25.5                                      | 5400         | 550          | *           | 05 - 6100DA             | - 195                   | - 195           | B-108 B-124 B-143                |
|                                           | 300                                    | 30.6                                      | 5400         | 550         | *           |                                           | 300                                    | 30.6                                      | 5400         | 550          | *           | 05 - 6105DA             | - 195                   | - 195           | B-108 B-124 B-143                |
|                                           |                                        |                                           | <b>9810</b>  | <b>1000</b> | <b>1.02</b> |                                           |                                        |                                           | <b>9810</b>  | <b>1000</b>  | <b>1.02</b> | <b>05 - 6120DA</b>      | <b>- 195</b>            | <b>- 195</b>    | <b>B-108 B-124 B-143</b>         |
|                                           |                                        |                                           | 9810         | 1000        | 1.14        |                                           |                                        |                                           | 9810         | 1000         | 1.37        | 05 - 6120DB             | - 195                   | - 195           | B-108 B-124 B-143                |
|                                           |                                        |                                           | 9810         | 1000        | 1.36        |                                           |                                        |                                           | 9810         | 1000         | 1.64        | 05 - 6125DB             | - 195                   | - 195           | B-108 B-124 B-143                |
|                                           | 462                                    | 47.1                                      | 14700        | 1500        | 1.69        |                                           | 383                                    | 39.1                                      | 14700        | 1500         | 2.04        | 05 - 6130DB             | - 195                   | - 195           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 14700        | 1500        | 2.03        |                                           |                                        |                                           | 14700        | 1500         | 2.45        | 05 - 6135DB             | - 195                   | - 195           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 16000        | 1630        | 2.65        |                                           |                                        |                                           | 16000        | 1630         | 3.20        | 05 - 6140DB             | - 195                   | - 195           | B-109 B-125 B-144                |
| 6.28                                      | 300                                    | 30.6                                      | 5400         | 550         | *           | 7.58                                      | 300                                    | 30.6                                      | 5400         | 550          | *           | 05 - 6145DB             | - 195                   | - 195           | B-109 B-125 B-144                |
|                                           |                                        |                                           | <b>9810</b>  | <b>1000</b> | <b>1.02</b> |                                           |                                        |                                           | <b>9810</b>  | <b>1000</b>  | <b>1.02</b> | 05 - 6105DA             | - 231                   | - 231           | B-108 B-124 B-143                |
|                                           |                                        |                                           | 9810         | 1000        | 1.15        |                                           |                                        |                                           | 9810         | 1000         | 1.39        | 05 - 6125DB             | - 231                   | - 231           | B-108 B-124 B-143                |
|                                           |                                        |                                           | 14700        | 1500        | 1.42        |                                           |                                        |                                           | 14700        | 1500         | 1.72        | 05 - 6130DB             | - 231                   | - 231           | B-109 B-125 B-144                |
|                                           | 548                                    | 55.8                                      | 14700        | 1500        | 1.72        |                                           | 454                                    | 46.3                                      | 14700        | 1500         | 2.07        | 05 - 6135DB             | - 231                   | - 231           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 16000        | 1630        | 2.24        |                                           |                                        |                                           | 16000        | 1630         | 2.70        | 05 - 6140DB             | - 231                   | - 231           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 16000        | 1630        | 2.44        |                                           |                                        |                                           | 16000        | 1630         | 2.95        | 05 - 6145DB             | - 231                   | - 231           | B-109 B-125 B-144                |
|                                           |                                        |                                           |              |             |             |                                           |                                        |                                           |              |              |             |                         |                         |                 |                                  |
| 5.31                                      | 522                                    | 53.2                                      | 9810         | 1000        | *           | 6.41                                      | 522                                    | 53.2                                      | 9810         | 1000         | *           | 05 - 6120DA             | - 273                   | - 273           | B-108 B-124 B-143                |
|                                           |                                        |                                           | 9810         | 1000        | 0.97        |                                           |                                        |                                           | 9810         | 1000         | 1.02        | 05 - 6125DA             | - 273                   | - 273           | B-108 B-124 B-143                |
|                                           |                                        |                                           | 9810         | 1000        | 0.97        |                                           |                                        |                                           | 9810         | 1000         | 1.17        | 05 - 6125DB             | - 273                   | - 273           | B-108 B-124 B-143                |
|                                           |                                        |                                           | <b>14700</b> | <b>1500</b> | <b>1.02</b> |                                           |                                        |                                           | <b>14700</b> | <b>1500</b>  | <b>1.02</b> | <b>05 - 6130DA</b>      | <b>- 273</b>            | <b>- 273</b>    | <b>B-109 B-125 B-144</b>         |
|                                           |                                        |                                           | 14700        | 1500        | 1.21        |                                           |                                        |                                           | 14700        | 1500         | 1.45        | 05 - 6130DB             | - 273                   | - 273           | B-109 B-125 B-144                |
|                                           | 647                                    | 66.0                                      | 14700        | 1500        | 1.45        |                                           | 536                                    | 54.7                                      | 14700        | 1500         | 1.75        | 05 - 6135DB             | - 273                   | - 273           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 16000        | 1630        | 1.89        |                                           |                                        |                                           | 16000        | 1630         | 2.28        | 05 - 6140DB             | - 273                   | - 273           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 16000        | 1630        | 2.07        |                                           |                                        |                                           | 16000        | 1630         | 2.49        | 05 - 6145DB             | - 273                   | - 273           | B-109 B-125 B-144                |
| 4.55                                      | 520                                    | 53.0                                      | 9810         | 1000        | *           | 5.49                                      | 520                                    | 53.0                                      | 9810         | 1000         | *           | 05 - 6160DA             | - 273                   | - 273           | B-110 B-126 B-145                |
|                                           |                                        |                                           | 9810         | 1000        | 0.83        |                                           |                                        |                                           | 9810         | 1000         | 1.01        | 05 - 6120DA             | - 319                   | - 319           | B-108 B-124 B-143                |
|                                           |                                        |                                           | <b>14700</b> | <b>1500</b> | <b>1.02</b> |                                           |                                        |                                           | <b>14700</b> | <b>1500</b>  | <b>1.02</b> | 05 - 6125DA             | - 319                   | - 319           | B-108 B-124 B-143                |
|                                           |                                        |                                           | 14700        | 1500        | 1.03        |                                           |                                        |                                           | 14700        | 1500         | 1.24        | <b>05 - 6130DA</b>      | <b>- 319</b>            | <b>- 319</b>    | <b>B-109 B-125 B-144</b>         |
|                                           |                                        |                                           | 14700        | 1500        | 1.02        |                                           |                                        |                                           | 14700        | 1500         | 1.02        | 05 - 6130DB             | - 319                   | - 319           | B-109 B-125 B-144                |
|                                           | 756                                    | 77.1                                      | 14700        | 1500        | 1.24        |                                           | 627                                    | 63.9                                      | 14700        | 1500         | 1.50        | 05 - 6135DA             | - 319                   | - 319           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 16000        | 1630        | 1.62        |                                           |                                        |                                           | 16000        | 1630         | 1.95        | 05 - 6135DB             | - 319                   | - 319           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 16000        | 1630        | 1.81        |                                           |                                        |                                           | 16000        | 1630         | 2.19        | 05 - 6140DB             | - 319                   | - 319           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 22100        | 2250        | 2.32        |                                           |                                        |                                           | 22100        | 2250         | 2.80        | 05 - 6145DB             | - 319                   | - 319           | B-109 B-125 B-144                |
|                                           |                                        |                                           | 22100        | 2250        | 2.78        |                                           |                                        |                                           | 22100        | 2250         | 3.35        | 05 - 6160DA             | - 319                   | - 319           | B-110 B-126 B-145                |
|                                           |                                        |                                           |              |             |             |                                           |                                        |                                           | 22100        | 2250         |             | 05 - 6165DA             | - 319                   | - 319           | B-110 B-126 B-145                |

6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.





## Selection Tables Gearmotors



|        |                      |           |
|--------|----------------------|-----------|
| 0.4 kW | n: Motor Speed       |           |
|        | Hz                   | 50Hz      |
|        | P                    | 4 6       |
|        | n <sub>1</sub> r/min | 1450 980  |
|        |                      | 1750 1165 |

| 50Hz                                      |                                |         |                                     |       |      | 60Hz                                      |                                |         |                                     |       |      | Nomenclature            |            |                 | Page of Dimension Sheet |       |       |
|-------------------------------------------|--------------------------------|---------|-------------------------------------|-------|------|-------------------------------------------|--------------------------------|---------|-------------------------------------|-------|------|-------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] | [kgf·m] | Allowable Radial Load<br>Pro<br>[N] | [kgf] | SF   | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] | [kgf·m] | Allowable Radial Load<br>Pro<br>[N] | [kgf] | SF   | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVM  |
| 0.980                                     | 1760                           | 179     | 22100                               | 2250  | *    | 1.18                                      | 1760                           | 179     | 22100                               | 2250  | *    | 05 - 6160DA             | - 1479     |                 | B-110                   | B-126 | B-145 |
|                                           | 2050                           | 209     | 21800                               | 2220  | *    |                                           | 2050                           | 209     | 21800                               | 2220  | *    | 05 - 6165DA             | - 1479     |                 | B-110                   | B-126 | B-145 |
|                                           | 2530                           | 258     | 29500                               | 3010  | *    |                                           | 2530                           | 258     | 29500                               | 3010  | *    | 05 - 6170DA             | - 1479     |                 | B-110                   | B-126 | B-145 |
|                                           | 3510                           | 357     | 29500                               | 3010  | 0.90 |                                           | 2910                           | 296     | 29500                               | 3010  | 1.08 | 05 - 6175DA             | - 1479     |                 | B-110                   | B-126 | B-145 |
| 0.784                                     | 2100                           | 214     | 22100                               | 2250  | *    | 0.946                                     | 2100                           | 214     | 22100                               | 2250  | *    | 05 - 6165DA             | - 1849     |                 | B-110                   | B-126 | B-145 |
|                                           | 2530                           | 258     | 29500                               | 3010  | *    |                                           | 2530                           | 258     | 29500                               | 3010  | *    | 05 - 6170DA             | - 1849     |                 | B-110                   | B-126 | B-145 |
|                                           | 3150                           | 321     | 29500                               | 3010  | *    |                                           | 3150                           | 321     | 29500                               | 3010  | *    | 05 - 6175DA             | - 1849     |                 | B-110                   | B-126 | B-145 |
|                                           | 4380                           | 447     | 41700                               | 4250  | 0.93 |                                           | 3630                           | 370     | 41700                               | 4250  | 1.12 | 05 - 6180DA             | - 1849     |                 | B-110                   | B-126 | B-145 |
| 0.702                                     | 2530                           | 258     | 29500                               | 3010  | *    | 0.847                                     | 2530                           | 258     | 29500                               | 3010  | *    | 05 - 6170DA             | - 2065     |                 | B-110                   | B-126 | B-145 |
|                                           | 3150                           | 321     | 29500                               | 3010  | *    |                                           | 3150                           | 321     | 29500                               | 3010  | *    | 05 - 6175DA             | - 2065     |                 | B-110                   | B-126 | B-145 |
|                                           | 4050                           | 413     | 41700                               | 4250  | *    |                                           | 4050                           | 413     | 41700                               | 4250  | *    | 05 - 6180DA             | - 2065     |                 | B-110                   | B-126 | B-145 |
|                                           | 5000                           | 510     | 41600                               | 4240  | *    |                                           | 5000                           | 510     | 41600                               | 4240  | *    | 05 - 6185DA             | - 2065     |                 | B-110                   | B-126 | B-145 |
| 0.572                                     | 3150                           | 321     | 29500                               | 3010  | *    | 0.690                                     | 3150                           | 321     | 29500                               | 3010  | *    | 05 - 6175DA             | - 2537     |                 | B-110                   | B-126 | B-145 |
|                                           | 4050                           | 413     | 41700                               | 4250  | *    |                                           | 4050                           | 413     | 41700                               | 4250  | *    | 05 - 6180DA             | - 2537     |                 | B-110                   | B-126 | B-145 |
|                                           | 5000                           | 510     | 41600                               | 4240  | *    |                                           | 5000                           | 510     | 41600                               | 4240  | *    | 05 - 6185DA             | - 2537     |                 | B-110                   | B-126 | B-145 |
|                                           | 6020                           | 613     | 41200                               | 4200  | 0.83 |                                           | 4980                           | 508     | 41600                               | 4240  | 1.00 | 05 - 6185DA             | - 2537     |                 | B-110                   | B-126 | B-145 |
| 0.476                                     | 4060                           | 414     | 41700                               | 4250  | *    | 0.575                                     | 4060                           | 414     | 41700                               | 4250  | *    | 05 - 6180DA             | - 3045     |                 | B-110                   | B-126 | B-145 |
|                                           | 5000                           | 510     | 41700                               | 4250  | *    |                                           | 5000                           | 510     | 41700                               | 4250  | *    | 05 - 6185DA             | - 3045     |                 | B-110                   | B-126 | B-145 |
| 0.417                                     | 4050                           | 413     | 41700                               | 4250  | *    | 0.503                                     | 4050                           | 413     | 41700                               | 4250  | *    | 05 - 6180DA             | - 3481     |                 | B-110                   | B-126 | B-145 |
|                                           | 5000                           | 510     | 41600                               | 4240  | *    |                                           | 5000                           | 510     | 41600                               | 4240  | *    | 05 - 6185DA             | - 3481     |                 | B-110                   | B-126 | B-145 |
| 0.327                                     | 4060                           | 414     | 41700                               | 4250  | *    | 0.394                                     | 4060                           | 414     | 41700                               | 4250  | *    | 05 - 6180DA             | - 4437     |                 | B-110                   | B-126 | B-145 |
|                                           | 5000                           | 510     | 41700                               | 4250  | *    |                                           | 5000                           | 510     | 41700                               | 4250  | *    | 05 - 6185DA             | - 4437     |                 | B-110                   | B-126 | B-145 |
| 0.282                                     | 4060                           | 414     | 41700                               | 4250  | *    | 0.341                                     | 4060                           | 414     | 41700                               | 4250  | *    | 05 - 6180DA             | - 5133     |                 | B-110                   | B-126 | B-145 |
|                                           | 5000                           | 510     | 41700                               | 4250  | *    |                                           | 5000                           | 510     | 41700                               | 4250  | *    | 05 - 6185DA             | - 5133     |                 | B-110                   | B-126 | B-145 |
| 0.235                                     | 4060                           | 414     | 41700                               | 4250  | *    | 0.283                                     | 4060                           | 414     | 41700                               | 4250  | *    | 05 - 6180DA             | - 6177     |                 | B-110                   | B-126 | B-145 |
|                                           | 5000                           | 510     | 41700                               | 4250  | *    |                                           | 5000                           | 510     | 41700                               | 4250  | *    | 05 - 6185DA             | - 6177     |                 | B-110                   | B-126 | B-145 |
| 0.192                                     | 4060                           | 414     | 41700                               | 4250  | *    | 0.231                                     | 4060                           | 414     | 41700                               | 4250  | *    | 05 - 6180DA             | - 7569     |                 | B-110                   | B-126 | B-145 |
|                                           | 5000                           | 510     | 41700                               | 4250  | *    |                                           | 5000                           | 510     | 41700                               | 4250  | *    | 05 - 6185DA             | - 7569     |                 | B-110                   | B-126 | B-145 |

GEARMOTORS

Selection Tables  
0.4 kW

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

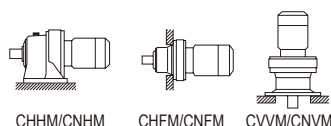








## Selection Tables Gearmotors



|         |                |       |      |     |      |      |
|---------|----------------|-------|------|-----|------|------|
| 0.55 kW | Hz             |       | 50Hz |     | 60Hz |      |
|         | P              |       | 4    | 6   | 4    | 6    |
|         | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

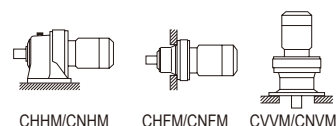
n: Motor Speed

| 50Hz                                      |                                                    |                                           |       |      | 60Hz                                      |                                                    |                                           |       |      | Nomenclature            |             |                 | Page of Dimension Sheet |       |       |
|-------------------------------------------|----------------------------------------------------|-------------------------------------------|-------|------|-------------------------------------------|----------------------------------------------------|-------------------------------------------|-------|------|-------------------------|-------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] |       | SF   | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] |       | SF   | Input Capacity - Symbol | Frame Size  | Reduction Ratio | CNHM                    | CNFM  | CNVN  |
|                                           |                                                    |                                           |       |      |                                           |                                                    |                                           |       |      |                         |             |                 | CHHM                    | CHFM  | CVVM  |
| 5.31                                      | 890                                                | 90.7                                      | 14700 | 1500 | 6.41                                      | 737                                                | 75.2                                      | 14700 | 1500 | 1.27                    | 08 - 6135DB | - 273           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 1.66                    | 08 - 6140DB | - 273           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 1.81                    | 08 - 6145DB | - 273           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 22100 | 2250 |                                           |                                                    |                                           | 22100 | 2250 | 2.38                    | 08 - 6160DA | - 273           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 22100 | 2250 |                                           |                                                    |                                           | 22100 | 2250 | 2.77                    | 08 - 6165DA | - 273           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.77                    | 08 - 6170DA | - 273           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 3.43                    | 08 - 6170DB | - 273           | B-110                   | B-126 | B-145 |
| 4.55                                      | 1040                                               | 106                                       | 14700 | 1500 | 5.49                                      | 862                                                | 87.8                                      | 14700 | 1500 | 1.09                    | 08 - 6125DB | - 319           | B-108                   | B-124 | B-143 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 1.42                    | 08 - 6130DB | - 319           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 1.59                    | 08 - 6135DB | - 319           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 22100 | 2250 |                                           |                                                    |                                           | 22100 | 2250 | 2.04                    | 08 - 6140DB | - 319           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 22100 | 2250 |                                           |                                                    |                                           | 22100 | 2250 | 2.44                    | 08 - 6145DB | - 319           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.77                    | 08 - 6160DA | - 319           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.94                    | 08 - 6165DA | - 319           | B-110                   | B-126 | B-145 |
| 3.85                                      | 1230                                               | 125                                       | 14700 | 1500 | 4.64                                      | 1020                                               | 104                                       | 14700 | 1500 | 1.20                    | 08 - 6170DA | - 319           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 1.35                    | 08 - 6170DB | - 319           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 1.72                    | 08 - 6175DA | - 319           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 22100 | 2250 |                                           |                                                    |                                           | 22100 | 2250 | 2.06                    | 08 - 6130DB | - 377           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.48                    | 08 - 6135DB | - 377           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.77                    | 08 - 6145DB | - 377           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 3.09                    | 08 - 6160DA | - 377           | B-110                   | B-126 | B-145 |
| 3.07                                      | 1540                                               | 157                                       | 14700 | 1500 | 3.70                                      | 1280                                               | 130                                       | 14700 | 1500 | 1.07                    | 08 - 6165DA | - 377           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 1.36                    | 08 - 6170DA | - 377           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 14800 | 1510 |                                           |                                                    |                                           | 14800 | 1510 | 1.64                    | 08 - 6175DA | - 377           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 22100 | 2250 |                                           |                                                    |                                           | 22100 | 2250 | 1.98                    | 08 - 6135DB | - 473           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.47                    | 08 - 6140DB | - 473           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.47                    | 08 - 6145DB | - 473           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.47                    | 08 - 6160DA | - 473           | B-110                   | B-126 | B-145 |
| 2.59                                      | 1820                                               | 186                                       | 14700 | 1500 | 3.13                                      | 1510                                               | 154                                       | 14700 | 1500 | 1.68                    | 08 - 6170DA | - 473           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 2.09                    | 08 - 6175DA | - 473           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 15700 | 1600 |                                           |                                                    |                                           | 15700 | 1600 | *                       | 08 - 6140DB | - 559           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 22100 | 2250 |                                           |                                                    |                                           | 22100 | 2250 | 1.39                    | 08 - 6145DB | - 559           | B-109                   | B-125 | B-144 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 1.68                    | 08 - 6165DA | - 559           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.09                    | 08 - 6170DA | - 559           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 2.09                    | 08 - 6175DA | - 559           | B-110                   | B-126 | B-145 |
| 2.23                                      | 2120                                               | 216                                       | 14700 | 1500 | 2.70                                      | 1750                                               | 179                                       | 14700 | 1500 | 1.20                    | 08 - 6160DA | - 649           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 1.44                    | 08 - 6165DA | - 649           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 22100 | 2250 |                                           |                                                    |                                           | 22100 | 2250 | 1.80                    | 08 - 6170DA | - 649           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 1.80                    | 08 - 6175DA | - 649           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 1.80                    | 08 - 6160DA | - 731           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 1.80                    | 08 - 6165DA | - 731           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 1.80                    | 08 - 6170DA | - 731           | B-110                   | B-126 | B-145 |
| 1.98                                      | 2380                                               | 243                                       | 14700 | 1500 | 2.39                                      | 1970                                               | 201                                       | 14700 | 1500 | 1.28                    | 08 - 6175DA | - 731           | B-110                   | B-126 | B-145 |
|                                           |                                                    |                                           | 16000 | 1630 |                                           |                                                    |                                           | 16000 | 1630 | 1.60                    |             |                 |                         |       |       |
|                                           |                                                    |                                           | 22100 | 2250 |                                           |                                                    |                                           | 22100 | 2250 | 1.06                    |             |                 |                         |       |       |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 1.28                    |             |                 |                         |       |       |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 1.60                    |             |                 |                         |       |       |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 1.60                    |             |                 |                         |       |       |
|                                           |                                                    |                                           | 29500 | 3010 |                                           |                                                    |                                           | 29500 | 3010 | 1.60                    |             |                 |                         |       |       |

6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

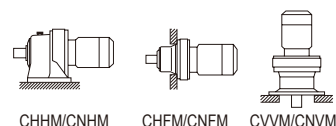
## Selection Tables Gearmotors

| 0.55 kW | n <sub>1</sub> : Motor Speed |       |      |     |      |      |
|---------|------------------------------|-------|------|-----|------|------|
|         | Hz                           |       | 50Hz |     | 60Hz |      |
|         | P                            |       | 4    | 6   | 4    | 6    |
|         | n <sub>1</sub>               | r/min | 1450 | 980 | 1750 | 1165 |



| 50Hz                           |                                   |                              |       |       | 60Hz                           |                                   |                              |       |       | Nomenclature            |            |                 | Page of Dimension Sheet |       |       |
|--------------------------------|-----------------------------------|------------------------------|-------|-------|--------------------------------|-----------------------------------|------------------------------|-------|-------|-------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |       | SF    | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |       | SF    | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVVM |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]   | [kgf] | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]   | [kgf] |                         |            |                 | CHHM                    | CHFM  | CVVM  |
| 1.72                           | 1760                              | 179                          | 22100 | 2250  | 2.08                           | 1760                              | 179                          | 22100 | 2250  | 08 -                    | 6160DA     | - 841           | B-110                   | B-126 | B-145 |
|                                | 2100                              | 214                          | 22100 | 2250  |                                | 2100                              | 214                          | 22100 | 2250  |                         | 6165DA     | - 841           | B-110                   | B-126 | B-145 |
|                                | 2740                              | 279                          | 29500 | 3010  |                                | 2270                              | 232                          | 29500 | 3010  |                         | 6175DA     | - 841           | B-110                   | B-126 | B-145 |
| 1.45                           | 2100                              | 214                          | 22100 | 2250  | 1.74                           | 2100                              | 214                          | 22100 | 2250  | 08 -                    | 6165DA     | - 1003          | B-110                   | B-126 | B-145 |
|                                | 2530                              | 258                          | 29500 | 3010  |                                | 2530                              | 258                          | 29500 | 3010  |                         | 6170DA     | - 1003          | B-110                   | B-126 | B-145 |
|                                | 3270                              | 333                          | 29500 | 3010  |                                | 2710                              | 276                          | 29500 | 3010  |                         | 6175DA     | - 1003          | B-110                   | B-126 | B-145 |
| 1.16                           | 2530                              | 258                          | 29500 | 3010  | 1.40                           | 2530                              | 258                          | 29500 | 3010  | 08 -                    | 6170DA     | - 1247          | B-110                   | B-126 | B-145 |
|                                | 3150                              | 321                          | 29500 | 3010  |                                | 3150                              | 321                          | 29500 | 3010  |                         | 6175DA     | - 1247          | B-110                   | B-126 | B-145 |
| 0.980                          | 3150                              | 321                          | 29500 | 3010  | 1.18                           | 3150                              | 321                          | 29500 | 3010  | 08 -                    | 6175DA     | - 1479          | B-110                   | B-126 | B-145 |
| 0.784                          | 4060                              | 414                          | 41700 | 4250  | 0.946                          | 4060                              | 414                          | 41700 | 4250  | 08 -                    | 6180DA     | - 1849          | B-110                   | B-126 | B-145 |

| 0.75 kW | n <sub>1</sub> : Motor Speed |       |      |     |      |      |
|---------|------------------------------|-------|------|-----|------|------|
|         | Hz                           |       | 50Hz |     | 60Hz |      |
|         | P                            |       | 4    | 6   | 4    | 6    |
|         | n <sub>1</sub>               | r/min | 1450 | 980 | 1750 | 1165 |

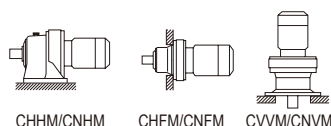


| 50Hz                           |                                   |                              |             |            | 60Hz                           |                                   |                              |             |            | Nomenclature            |               |                 | Page of Dimension Sheet |      |              |
|--------------------------------|-----------------------------------|------------------------------|-------------|------------|--------------------------------|-----------------------------------|------------------------------|-------------|------------|-------------------------|---------------|-----------------|-------------------------|------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |             | SF         | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |             | SF         | Input Capacity - Symbol | Frame Size    | Reduction Ratio | CNHM                    | CNFM | CNVVM        |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]         | [kgf]      | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]         | [kgf]      |                         |               |                 | CHHM                    | CHFM | CVVM         |
| 580                            | 11.7                              | 1.20                         | 1130        | 115        | 700                            | 9.72                              | 0.991                        | 1080        | 110        | 1 -                     | 6070SK        | - 2.5 (K)       | B-98                    | -    | B-133        |
|                                |                                   |                              | 1130        | 115        |                                |                                   |                              | 1080        | 110        |                         | 6075SK        | - 2.5 (K)       | B-98                    | -    | B-133        |
|                                |                                   |                              | 1260        | 128        |                                |                                   |                              | 1190        | 121        |                         | 6080SK        | - 2.5 (K)       | B-98                    | -    | B-133        |
|                                |                                   |                              | 1260        | 128        |                                |                                   |                              | 1190        | 121        |                         | 6085SK        | - 2.5 (K)       | B-98                    | -    | B-133        |
|                                |                                   |                              | 2250        | 229        |                                |                                   |                              | 2130        | 217        |                         | 6090SK        | - 2.5 (K)       | B-98                    | -    | B-133        |
|                                |                                   |                              | 2250        | 229        |                                |                                   |                              | 2130        | 217        |                         | 6095SK        | - 2.5 (K)       | B-98                    | -    | B-133        |
| 483                            | 14.1                              | 1.44                         | 1180        | 120        | 583                            | 11.7                              | 1.19                         | 1120        | 114        | 1 -                     | 6070SK        | - 3 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 1180        | 120        |                                |                                   |                              | 1120        | 114        |                         | 6075SK        | - 3 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 1310        | 134        |                                |                                   |                              | 1250        | 127        |                         | 6080SK        | - 3 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 1310        | 134        |                                |                                   |                              | 1250        | 127        |                         | 6085SK        | - 3 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 2340        | 239        |                                |                                   |                              | 2220        | 226        |                         | 6090SK        | - 3 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 2340        | 239        |                                |                                   |                              | 2220        | 226        |                         | 6095SK        | - 3 (K)         | B-98                    | -    | B-133        |
| 363                            | 18.8                              | 1.91                         | <b>1270</b> | <b>129</b> | 438                            | 15.6                              | 1.59                         | <b>1220</b> | <b>124</b> | 1 -                     | <b>6070SK</b> | - <b>4 (K)</b>  | <b>B-98</b>             | -    | <b>B-133</b> |
|                                |                                   |                              | 1270        | 129        |                                |                                   |                              | 1220        | 124        |                         | 6075SK        | - 4 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 1420        | 145        |                                |                                   |                              | 1350        | 138        |                         | 6080SK        | - 4 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 1420        | 145        |                                |                                   |                              | 1350        | 138        |                         | 6085SK        | - 4 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 2660        | 271        |                                |                                   |                              | 2520        | 257        |                         | 6090SK        | - 4 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 2660        | 271        |                                |                                   |                              | 2520        | 257        |                         | 6095SK        | - 4 (K)         | B-98                    | -    | B-133        |
| 290                            | 23.5                              | 2.39                         | <b>1370</b> | <b>140</b> | 350                            | 19.4                              | 1.98                         | <b>1290</b> | <b>132</b> | 1 -                     | <b>6070SK</b> | - <b>5 (K)</b>  | <b>B-98</b>             | -    | <b>B-133</b> |
|                                |                                   |                              | 1370        | 140        |                                |                                   |                              | 1290        | 132        |                         | 6075SK        | - 5 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 1530        | 156        |                                |                                   |                              | 1460        | 149        |                         | 6080SK        | - 5 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 1530        | 156        |                                |                                   |                              | 1460        | 149        |                         | 6085SK        | - 5 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 2820        | 287        |                                |                                   |                              | 2680        | 273        |                         | 6090SK        | - 5 (K)         | B-98                    | -    | B-133        |
|                                |                                   |                              | 2820        | 287        |                                |                                   |                              | 2680        | 273        |                         | 6095SK        | - 5 (K)         | B-98                    | -    | B-133        |

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.



## Selection Tables Gearmotors



|         |                |       |      |     |      |      |
|---------|----------------|-------|------|-----|------|------|
| 0.75 kW | Hz             |       | 50Hz |     | 60Hz |      |
|         | P              |       | 4    | 6   | 4    | 6    |
|         | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

| 50Hz                                      |                                        |                                           |    |  | 60Hz                                      |                                        |                                           |    |  | Nomenclature            |            |                 | Page of Dimension Sheet |       |       |
|-------------------------------------------|----------------------------------------|-------------------------------------------|----|--|-------------------------------------------|----------------------------------------|-------------------------------------------|----|--|-------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF |  | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF |  | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVVM |
| 242                                       | 28.2                                   | 2.87                                      |    |  | 292                                       | 23.3                                   | 2.38                                      |    |  | 1 - 6070SK              | - 6        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6075SK              | - 6        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6080SK              | - 6        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6085SK              | - 6        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6090SK              | - 6        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095SK              | - 6        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6100SK              | - 6        | (K)             | B-99                    | -     | B-134 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6085                | - 6        |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6090                | - 6        |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095                | - 6        |                 | B-100                   | B-116 | B-135 |
| 181                                       | 37.5                                   | 3.83                                      |    |  | 219                                       | 31.1                                   | 3.17                                      |    |  | 1 - 6075SK              | - 8        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6080SK              | - 8        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6085SK              | - 8        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6090SK              | - 8        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095SK              | - 8        | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6100SK              | - 8        | (K)             | B-99                    | -     | B-134 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6105SK              | - 8        | (K)             | B-99                    | -     | B-134 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6085                | - 8        |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6090                | - 8        |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095                | - 8        |                 | B-100                   | B-116 | B-135 |
| 145                                       | 46.9                                   | 4.78                                      |    |  | 175                                       | 38.9                                   | 3.96                                      |    |  | 1 - 6080SK              | - 10       | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6085SK              | - 10       | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6090SK              | - 10       | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095SK              | - 10       | (K)             | B-98                    | -     | B-133 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6100SK              | - 10       | (K)             | B-99                    | -     | B-134 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6105SK              | - 10       | (K)             | B-99                    | -     | B-134 |
| 132                                       | 51.6                                   | 5.26                                      |    |  | 159                                       | 42.8                                   | 4.36                                      |    |  | 1 - 6085                | - 11       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6090                | - 11       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095                | - 11       |                 | B-100                   | B-116 | B-135 |
| 112                                       | 61.0                                   | 6.22                                      |    |  | 135                                       | 50.5                                   | 5.15                                      |    |  | 1 - 6085                | - 13       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6090                | - 13       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095                | - 13       |                 | B-100                   | B-116 | B-135 |
| 96.7                                      | 70.4                                   | 7.18                                      |    |  | 117                                       | 58.3                                   | 5.95                                      |    |  | 1 - 6085                | - 15       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6090                | - 15       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095                | - 15       |                 | B-100                   | B-116 | B-135 |
| 85.3                                      | 79.8                                   | 8.13                                      |    |  | 103                                       | 66.1                                   | 6.74                                      |    |  | 1 - 6085                | - 17       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6090                | - 17       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095                | - 17       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6100                | - 17       |                 | B-101                   | B-117 | B-136 |
| 69.0                                      | 98.5                                   | 10.0                                      |    |  | 83.3                                      | 81.7                                   | 8.32                                      |    |  | 1 - 6090                | - 21       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6095                | - 21       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6100                | - 21       |                 | B-101                   | B-117 | B-136 |
| 58.0                                      | 117                                    | 12.0                                      |    |  | 70.0                                      | 97.2                                   | 9.91                                      |    |  | 1 - 6095                | - 25       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6100                | - 25       |                 | B-101                   | B-117 | B-136 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6105                | - 25       |                 | B-101                   | B-117 | B-136 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6110                | - 25       |                 | B-101                   | B-117 | B-136 |
| 50.0                                      | 136                                    | 13.9                                      |    |  | 60.3                                      | 113                                    | 11.5                                      |    |  | 1 - 6095                | - 29       |                 | B-100                   | B-116 | B-135 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6100                | - 29       |                 | B-101                   | B-117 | B-136 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6105                | - 29       |                 | B-101                   | B-117 | B-136 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6110                | - 29       |                 | B-101                   | B-117 | B-136 |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  | 1 - 6115                | - 29       |                 | B-101                   | B-117 | B-136 |

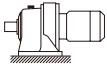
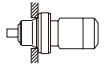
GEARMOTORS

Selection Tables  
0.75 kW

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

## Selection Tables Gearmotors

| 0.75 kW |  | n <sub>1</sub> : Motor Speed |       |      |     |      |      |  |  |  |
|---------|--|------------------------------|-------|------|-----|------|------|--|--|--|
|         |  | Hz                           |       | 50Hz |     | 60Hz |      |  |  |  |
|         |  | P                            |       | 4    | 6   | 4    | 6    |  |  |  |
|         |  | n <sub>1</sub>               | r/min | 1450 | 980 | 1750 | 1165 |  |  |  |

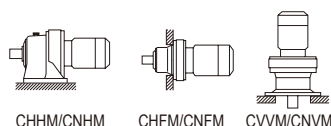

CHHM/CNHM
CHFM/CNFM
CVVM/CNVVM

| 50Hz                                      |                                        |                                           |    |  | 60Hz                                      |                                        |                                           |    |  | Nomenclature            |            |                 | Page of Dimension Sheet |              |               |
|-------------------------------------------|----------------------------------------|-------------------------------------------|----|--|-------------------------------------------|----------------------------------------|-------------------------------------------|----|--|-------------------------|------------|-----------------|-------------------------|--------------|---------------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF |  | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF |  | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM<br>CHHM            | CNFM<br>CHFM | CNVVM<br>CVVM |
| 41.4                                      | 164                                    | 16.7                                      |    |  | 50.0                                      | 136                                    | 13.9                                      |    |  | 1 - 6095                | - 35       |                 | B-100                   | B-116        | B-135         |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  |                         |            |                 |                         |              |               |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  |                         |            |                 |                         |              |               |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  |                         |            |                 |                         |              |               |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  |                         |            |                 |                         |              |               |
| 33.7                                      | 202                                    | 20.6                                      |    |  | 40.7                                      | 167                                    | 17.0                                      |    |  | 1 - 6105                | - 43       |                 | B-101                   | B-117        | B-136         |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  |                         |            |                 |                         |              |               |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  |                         |            |                 |                         |              |               |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  |                         |            |                 |                         |              |               |
|                                           |                                        |                                           |    |  |                                           |                                        |                                           |    |  |                         |            |                 |                         |              |               |

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.



## Selection Tables Gearmotors



|         |                |       |      |     |      |      |
|---------|----------------|-------|------|-----|------|------|
| 0.75 kW | Hz             |       | 50Hz |     | 60Hz |      |
|         | P              |       | 4    | 6   | 4    | 6    |
|         | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

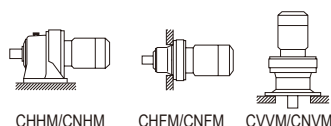
n: Motor Speed

| 50Hz                           |                       |         |                              |             |             | 60Hz                           |                       |         |                              |       | Nomenclature |                         |              | Page of Dimension Sheet |              |              |       |       |       |       |
|--------------------------------|-----------------------|---------|------------------------------|-------------|-------------|--------------------------------|-----------------------|---------|------------------------------|-------|--------------|-------------------------|--------------|-------------------------|--------------|--------------|-------|-------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |             | SF          | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF           | Input Capacity - Symbol | Frame Size   | - Reduction Ratio       | CNHM         | CNFM         | CNVN  |       |       |       |
| [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf]       | *           | [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] | *            |                         |              |                         | CHHM         | CHFM         | CVVM  |       |       |       |
| 10.1                           | 636                   | 64.8    | 525                          | 53.5        | 9810        | 1000                           | *                     | 12.2    | 527                          | 53.7  | 525          | 53.5                    | 9810         | 1000                    | *            | 1 - 6120DB   | - 143 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000        | 0.98        | 9810                           | 1000                  |         |                              |       | 1.20         | 1 - 6125DB              | - 143        | B-108                   | B-124        | B-143        |       |       |       |       |
|                                |                       |         | 14700                        | 1500        | 1.23        | 14700                          | 1500                  |         |                              |       | 1.48         | 1 - 6130DB              | - 143        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 14700                        | 1500        | 1.48        | 14700                          | 1500                  |         |                              |       | 1.78         | 1 - 6135DB              | - 143        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.93        | 16000                          | 1630                  |         |                              |       | 2.03         | 1 - 6140DB              | - 143        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.93        | 16000                          | 1630                  |         |                              |       | 2.33         | 1 - 6140DC              | - 143        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 2.03        | 16000                          | 1630                  |         |                              |       | 2.03         | 1 - 6145DB              | - 143        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 2.15        | 16000                          | 1630                  |         |                              |       | 2.60         | 1 - 6145DC              | - 143        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 2.76        | 22100                          | 2250                  |         |                              |       | 3.33         | 1 - 6160DB              | - 143        | B-110                   | B-126        | B-145        |       |       |       |       |
| 8.79                           | 734                   | 74.8    | 525                          | 53.5        | 9810        | 1000                           | *                     | 10.6    | 608                          | 62.0  | 525          | 53.5                    | 9810         | 1000                    | *            | 1 - 6120DB   | - 165 | B-108 | B-124 | B-143 |
|                                |                       |         | 9810                         | 1000        | 0.86        | 9810                           | 1000                  |         |                              |       | 1.04         | 1 - 6125DB              | - 165        | B-108                   | B-124        | B-143        |       |       |       |       |
|                                |                       |         | <b>14700</b>                 | <b>1500</b> | <b>1.06</b> | <b>14700</b>                   | <b>1500</b>           |         |                              |       | <b>1.28</b>  | 1 - <b>6130DB</b>       | - <b>165</b> | <b>B-109</b>            | <b>B-125</b> | <b>B-144</b> |       |       |       |       |
|                                |                       |         | 14700                        | 1500        | 1.28        | 14700                          | 1500                  |         |                              |       | 1.55         | 1 - 6135DB              | - 165        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.67        | 16000                          | 1630                  |         |                              |       | 2.02         | 1 - 6140DB              | - 165        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.85        | 16000                          | 1630                  |         |                              |       | 2.03         | 1 - 6145DB              | - 165        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.85        | 16000                          | 1630                  |         |                              |       | 2.23         | 1 - 6145DC              | - 165        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 2.03        | 22100                          | 2250                  |         |                              |       | 2.03         | 1 - 6160DA              | - 165        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 2.39        | 22100                          | 2250                  |         |                              |       | 2.89         | 1 - 6160DB              | - 165        | B-110                   | B-126        | B-145        |       |       |       |       |
| 22100                          | 2250                  | 2.86    | 22100                        | 2250        | 3.46        | 1 - 6165DB                     | - 165                 | B-110   | B-126                        | B-145 |              |                         |              |                         |              |              |       |       |       |       |
| 7.44                           | 867                   | 88.4    | 630                          | 64.2        | 9810        | 1000                           | *                     | 8.97    | 718                          | 73.2  | 630          | 64.2                    | 9810         | 1000                    | *            | 1 - 6125DB   | - 195 | B-108 | B-124 | B-143 |
|                                |                       |         | 14700                        | 1500        | 1.08        | 14700                          | 1500                  |         |                              |       | 1.31         | 1 - 6135DB              | - 195        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.41        | 16000                          | 1630                  |         |                              |       | 1.71         | 1 - 6140DB              | - 195        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.57        | 16000                          | 1630                  |         |                              |       | 1.89         | 1 - 6145DB              | - 195        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 2.02        | 22100                          | 2250                  |         |                              |       | 2.03         | 1 - 6160DA              | - 195        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 2.02        | 22100                          | 2250                  |         |                              |       | 2.44         | 1 - 6160DB              | - 195        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 2.03        | 22100                          | 2250                  |         |                              |       | 2.03         | 1 - 6165DA              | - 195        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 2.42        | 22100                          | 2250                  |         |                              |       | 2.92         | 1 - 6165DB              | - 195        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 29500                        | 3010        | 2.92        | 29500                          | 3010                  |         |                              |       | 3.52         | 1 - 6170DB              | - 195        | B-110                   | B-126        | B-145        |       |       |       |       |
| 6.28                           | 1030                  | 105     | 630                          | 64.2        | 9810        | 1000                           | *                     | 7.58    | 851                          | 86.7  | 630          | 64.2                    | 9810         | 1000                    | *            | 1 - 6125DB   | - 231 | B-108 | B-124 | B-143 |
|                                |                       |         | 780                          | 79.5        | 14700       | 1500                           | *                     |         |                              |       | 780          | 79.5                    | 14700        | 1500                    | *            | 1 - 6130DB   | - 231 | B-109 | B-125 | B-144 |
|                                |                       |         | 14700                        | 1500        | 0.92        | 14700                          | 1500                  |         |                              |       | 1.10         | 1 - 6135DB              | - 231        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.19        | 16000                          | 1630                  |         |                              |       | 1.44         | 1 - 6140DB              | - 231        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.30        | 16000                          | 1630                  |         |                              |       | 1.57         | 1 - 6145DB              | - 231        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 1.71        | 22100                          | 2250                  |         |                              |       | 2.03         | 1 - 6160DA              | - 231        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 2.03        | 22100                          | 2250                  |         |                              |       | 2.03         | 1 - 6165DA              | - 231        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 2.04        | 22100                          | 2250                  |         |                              |       | 2.47         | 1 - 6165DB              | - 231        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 29500                        | 3010        | 2.03        | 29500                          | 3010                  |         |                              |       | 2.03         | 1 - 6170DA              | - 231        | B-110                   | B-126        | B-145        |       |       |       |       |
| 29500                          | 3010                  | 2.46    | 29500                        | 3010        | 2.97        | 1 - 6170DB                     | - 231                 | B-110   | B-126                        | B-145 |              |                         |              |                         |              |              |       |       |       |       |
| 5.31                           | 1210                  | 124     | 780                          | 79.5        | 14700       | 1500                           | *                     | 6.41    | 1010                         | 103   | 780          | 79.5                    | 14700        | 1500                    | *            | 1 - 6130DB   | - 273 | B-109 | B-125 | B-144 |
|                                |                       |         | 940                          | 95.8        | 14700       | 1500                           | *                     |         |                              |       | 940          | 95.8                    | 14700        | 1500                    | *            | 1 - 6135DB   | - 273 | B-109 | B-125 | B-144 |
|                                |                       |         | <b>16000</b>                 | <b>1630</b> | <b>1.01</b> | <b>16000</b>                   | <b>1630</b>           |         |                              |       | <b>1.22</b>  | 1 - <b>6140DB</b>       | - <b>273</b> | <b>B-109</b>            | <b>B-125</b> | <b>B-144</b> |       |       |       |       |
|                                |                       |         | 16000                        | 1630        | 1.10        | 16000                          | 1630                  |         |                              |       | 1.33         | 1 - 6145DB              | - 273        | B-109                   | B-125        | B-144        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 1.45        | 22100                          | 2250                  |         |                              |       | 1.75         | 1 - 6160DA              | - 273        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 22100                        | 2250        | 1.73        | 22100                          | 2250                  |         |                              |       | 2.03         | 1 - 6165DA              | - 273        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 29500                        | 3010        | 2.03        | 29500                          | 3010                  |         |                              |       | 2.03         | 1 - 6170DA              | - 273        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 29500                        | 3010        | 2.08        | 29500                          | 3010                  |         |                              |       | 2.52         | 1 - 6170DB              | - 273        | B-110                   | B-126        | B-145        |       |       |       |       |
|                                |                       |         | 29500                        | 3010        | 2.03        | 29500                          | 3010                  |         |                              |       | 2.03         | 1 - 6175DA              | - 273        | B-110                   | B-126        | B-145        |       |       |       |       |
| 29500                          | 3010                  | 2.60    | 29500                        | 3010        | 3.13        | 1 - 6175DB                     | - 273                 | B-110   | B-126                        | B-145 |              |                         |              |                         |              |              |       |       |       |       |

6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.



## Selection Tables Gearmotors



n: Motor Speed

|         |                      |      |     |      |      |
|---------|----------------------|------|-----|------|------|
| 0.75 kW | Hz                   | 50Hz |     | 60Hz |      |
|         | P                    | 4    | 6   | 4    | 6    |
|         | n <sub>1</sub> r/min | 1450 | 980 | 1750 | 1165 |

| 50Hz                           |                       |         |                              |       |      | 60Hz                           |                       |         |                              |       |      | Nomenclature            |            |                 | Page of Dimension Sheet |       |       |
|--------------------------------|-----------------------|---------|------------------------------|-------|------|--------------------------------|-----------------------|---------|------------------------------|-------|------|-------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Input Capacity – Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVM  |
| [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      | [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      |                         |            |                 | CHHM                    | CHFM  | CVVM  |
| 1.16                           | 4060                  | 414     | 41700                        | 4250  | *    | 1.40                           | 4060                  | 414     | 41700                        | 4250  | *    | 1 -                     | 6180DA     | - 1247          | B-110                   | B-126 | B-145 |
|                                |                       |         | 41700                        | 4250  | 0.90 |                                |                       |         | 41700                        | 4250  | 1.09 | 1 -                     | 6185DA     | - 1247          | B-110                   | B-126 | B-145 |
|                                | 5540                  | 565     | 59000                        | 6010  | 1.15 |                                | 4590                  | 468     | 59000                        | 6010  | 1.39 | 1 -                     | 6190DA     | - 1247          | B-111                   | B-128 | B-147 |
|                                |                       |         | 59000                        | 6010  | 1.44 |                                |                       |         | 59000                        | 6010  | 1.73 | 1 -                     | 6195DA     | - 1247          | B-111                   | B-128 | B-147 |
| 0.980                          | 4060                  | 414     | 41700                        | 4250  | *    | 1.18                           | 4060                  | 414     | 41700                        | 4250  | *    | 1 -                     | 6180DA     | - 1479          | B-110                   | B-126 | B-145 |
|                                | 5000                  | 510     | 41700                        | 4250  | *    |                                | 5000                  | 510     | 41700                        | 4250  | *    | 1 -                     | 6185DA     | - 1479          | B-110                   | B-126 | B-145 |
|                                | 6580                  | 670     | 58800                        | 5990  | 1.21 |                                | 5450                  | 555     | 59000                        | 6010  | 1.46 | 1 -                     | 6195DA     | - 1479          | B-111                   | B-128 | B-147 |
| 0.784                          | 5000                  | 510     | 41700                        | 4250  | *    | 0.946                          | 5000                  | 510     | 41700                        | 4250  | *    | 1 -                     | 6185DA     | - 1849          | B-110                   | B-126 | B-145 |
|                                | 6380                  | 650     | 59000                        | 6010  | *    |                                | 6380                  | 650     | 59000                        | 6010  | *    | 1 -                     | 6190DA     | - 1849          | B-111                   | B-128 | B-147 |
|                                | 8220                  | 838     | 58900                        | 6000  | 0.97 |                                | 6810                  | 694     | 59000                        | 6010  | 1.17 | 1 -                     | 6195DA     | - 1849          | B-111                   | B-128 | B-147 |
| 0.702                          | 5000                  | 510     | 41600                        | 4240  | *    | 0.847                          | 5000                  | 510     | 41600                        | 4240  | *    | 1 -                     | 6185DA     | - 2065          | B-110                   | B-126 | B-145 |
|                                | 6380                  | 650     | 58600                        | 5970  | *    |                                | 6380                  | 650     | 58600                        | 5970  | *    | 1 -                     | 6190DA     | - 2065          | B-111                   | B-128 | B-147 |
|                                | 9180                  | 936     | 57800                        | 5890  | 0.87 |                                | 7610                  | 775     | 58200                        | 5940  | 1.05 | 1 -                     | 6195DA     | - 2065          | B-111                   | B-128 | B-147 |
| 0.572                          | 6380                  | 650     | 58600                        | 5970  | *    | 0.690                          | 6380                  | 650     | 58600                        | 5970  | *    | 1 -                     | 6190DA     | - 2537          | B-111                   | B-128 | B-147 |
|                                | 7960                  | 811     | 58100                        | 5930  | *    |                                | 7960                  | 811     | 58100                        | 5930  | *    | 1 -                     | 6195DA     | - 2537          | B-111                   | B-128 | B-147 |
|                                | 9300                  | 948     | 84100                        | 8570  | *    |                                | 9300                  | 948     | 84100                        | 8570  | *    | 1 -                     | 6205DA     | - 2537          | B-112                   | B-129 | B-148 |
|                                | 11300                 | 1150    | 84100                        | 8570  | 0.82 |                                | 9350                  | 953     | 84100                        | 8570  | 1.00 | 1 -                     | 6205DA     | - 2537          | B-112                   | B-129 | B-148 |
| 0.476                          | 6380                  | 650     | 58900                        | 6000  | *    | 0.575                          | 6380                  | 650     | 58900                        | 6000  | *    | 1 -                     | 6190DA     | - 3045          | B-111                   | B-128 | B-147 |
|                                | 7960                  | 811     | 58400                        | 5950  | *    |                                | 7960                  | 811     | 58400                        | 5950  | *    | 1 -                     | 6195DA     | - 3045          | B-111                   | B-128 | B-147 |
|                                | 8760                  | 893     | 84100                        | 8570  | *    |                                | 8760                  | 893     | 84100                        | 8570  | *    | 1 -                     | 6205DA     | - 3045          | B-112                   | B-129 | B-148 |
| 0.417                          | 6380                  | 650     | 58600                        | 5970  | *    | 0.503                          | 6380                  | 650     | 58600                        | 5970  | *    | 1 -                     | 6190DA     | - 3481          | B-111                   | B-128 | B-147 |
|                                | 7960                  | 811     | 58100                        | 5930  | *    |                                | 7960                  | 811     | 58100                        | 5930  | *    | 1 -                     | 6195DA     | - 3481          | B-111                   | B-128 | B-147 |
|                                | 9300                  | 948     | 84100                        | 8570  | *    |                                | 9300                  | 948     | 84100                        | 8570  | *    | 1 -                     | 6205DA     | - 3481          | B-112                   | B-129 | B-148 |
| 0.327                          | 6380                  | 650     | 58900                        | 6000  | *    | 0.394                          | 6380                  | 650     | 58900                        | 6000  | *    | 1 -                     | 6190DA     | - 4437          | B-111                   | B-128 | B-147 |
|                                | 7960                  | 811     | 58400                        | 5950  | *    |                                | 7960                  | 811     | 58400                        | 5950  | *    | 1 -                     | 6195DA     | - 4437          | B-111                   | B-128 | B-147 |
|                                | 8760                  | 893     | 84100                        | 8570  | *    |                                | 8760                  | 893     | 84100                        | 8570  | *    | 1 -                     | 6205DA     | - 4437          | B-112                   | B-129 | B-148 |
| 0.282                          | 6380                  | 650     | 58900                        | 6000  | *    | 0.341                          | 6380                  | 650     | 58900                        | 6000  | *    | 1 -                     | 6190DA     | - 5133          | B-111                   | B-128 | B-147 |
|                                | 7960                  | 811     | 58400                        | 5950  | *    |                                | 7960                  | 811     | 58400                        | 5950  | *    | 1 -                     | 6195DA     | - 5133          | B-111                   | B-128 | B-147 |
|                                | 9300                  | 948     | 84100                        | 8570  | *    |                                | 9300                  | 948     | 84100                        | 8570  | *    | 1 -                     | 6205DA     | - 5133          | B-112                   | B-129 | B-148 |
| 0.235                          | 6380                  | 650     | 58900                        | 6000  | *    | 0.283                          | 6380                  | 650     | 58900                        | 6000  | *    | 1 -                     | 6190DA     | - 6177          | B-111                   | B-128 | B-147 |
|                                | 7960                  | 811     | 58400                        | 5950  | *    |                                | 7960                  | 811     | 58400                        | 5950  | *    | 1 -                     | 6195DA     | - 6177          | B-111                   | B-128 | B-147 |
|                                | 8760                  | 893     | 84100                        | 8570  | *    |                                | 8760                  | 893     | 84100                        | 8570  | *    | 1 -                     | 6205DA     | - 6177          | B-112                   | B-129 | B-148 |
| 0.192                          | 6380                  | 650     | 58900                        | 6000  | *    | 0.231                          | 6380                  | 650     | 58900                        | 6000  | *    | 1 -                     | 6190DA     | - 7569          | B-111                   | B-128 | B-147 |
|                                | 7960                  | 811     | 58400                        | 5950  | *    |                                | 7960                  | 811     | 58400                        | 5950  | *    | 1 -                     | 6195DA     | - 7569          | B-111                   | B-128 | B-147 |
|                                | 8760                  | 893     | 84100                        | 8570  | *    |                                | 8760                  | 893     | 84100                        | 8570  | *    | 1 -                     | 6205DA     | - 7569          | B-112                   | B-129 | B-148 |

GEARMOTORS

Selection Tables  
0.75 kW

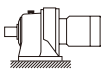
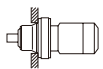
6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.







## Selection Tables Gearmotors

| 1.1 kW                         |                                   |                              |              |             |             | n <sub>1</sub> : Motor Speed   |                                   |                              |              |             |             |  |              |                 |  |              |           |  |  |           |  |  |
|--------------------------------|-----------------------------------|------------------------------|--------------|-------------|-------------|--------------------------------|-----------------------------------|------------------------------|--------------|-------------|-------------|-------------------------------------------------------------------------------------|--------------|-----------------|-------------------------------------------------------------------------------------|--------------|-----------|-------------------------------------------------------------------------------------|--|-----------|--|--|
|                                |                                   |                              |              |             |             | Hz                             |                                   | 50Hz                         |              | 60Hz        |             |                                                                                     |              |                 |                                                                                     |              |           |                                                                                     |  |           |  |  |
|                                |                                   |                              |              |             |             | P                              |                                   | 4                            | 6            | 4           | 6           |                                                                                     |              |                 |                                                                                     |              |           |                                                                                     |  |           |  |  |
| n <sub>1</sub>                 |                                   | r/min                        |              | 1450        | 980         | 1750                           | 1165                              |                              |              |             |             |                                                                                     |              | CHHM/CNHM       |                                                                                     |              | CHFM/CNFM |                                                                                     |  | CVVM/CNVM |  |  |
| 50Hz                           |                                   |                              |              |             |             | 60Hz                           |                                   |                              |              |             |             | Nomenclature                                                                        |              |                 | Page of Dimension Sheet                                                             |              |           |                                                                                     |  |           |  |  |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |              | SF          |             | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |              | SF          |             | Input Capacity - Symbol                                                             | Frame Size   | Reduction Ratio | CNHM                                                                                | CNFM         | CNVM      |                                                                                     |  |           |  |  |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]          | [kgf]       |             | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]          | [kgf]       |             |                                                                                     |              |                 | CHHM                                                                                | CHFM         | CVVM      |                                                                                     |  |           |  |  |
| 16.7                           | 599                               | 61.0                         | 9620         | 981         | 0.94        | 20.1                           | 496                               | 50.6                         | 9810         | 1000        | 1.03        | 1H -                                                                                | 6125         | - 87            | B-101                                                                               | B-117        | B-136     |                                                                                     |  |           |  |  |
|                                |                                   |                              | <b>14700</b> | <b>1500</b> | <b>1.29</b> |                                |                                   |                              | <b>1H -</b>  | <b>6130</b> | <b>- 87</b> | <b>B-102</b>                                                                        | <b>B-118</b> | <b>B-137</b>    |                                                                                     |              |           |                                                                                     |  |           |  |  |
|                                |                                   |                              | 14700        | 1500        | 1.50        |                                |                                   |                              | 1H -         | 6135        | - 87        | B-102                                                                               | B-118        | B-137           |                                                                                     |              |           |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.80        |                                |                                   |                              | 1H -         | 6140        | - 87        | B-102                                                                               | B-118        | B-137           |                                                                                     |              |           |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.96        |                                |                                   |                              | 1H -         | 6145        | - 87        | B-102                                                                               | B-118        | B-137           |                                                                                     |              |           |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 2.93        |                                |                                   |                              | 1H -         | 6160        | - 87        | B-103                                                                               | B-119        | B-138           |                                                                                     |              |           |                                                                                     |  |           |  |  |
| 13.9                           | 678                               | 69.1                         | 525          | 53.5        | *           | 16.8                           | 562                               | 57.3                         | 525          | 53.5        | *           | 1H -                                                                                | 6120DB       | - 104           | B-108                                                                               | B-124        | B-143     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 9810         | 1000        | 0.93        |                                |                                   |                              | 9810         | 1000        | 1.12        | 1H -                                                                                | 6125DB       | - 104           | B-108                                                                               | B-124        | B-143     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 14700        | 1500        | 1.15        |                                |                                   |                              | 14700        | 1500        | 1.39        | 1H -                                                                                | 6130DB       | - 104           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 14700        | 1500        | 1.39        |                                |                                   |                              | 14700        | 1500        | 1.39        | 1H -                                                                                | 6135DB       | - 104           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.39        |                                |                                   |                              | 16000        | 1630        | 1.39        | 1H -                                                                                | 6140DB       | - 104           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.81        |                                |                                   |                              | 16000        | 1630        | 2.18        | 1H -                                                                                | 6140DC       | - 104           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 2.02        |                                |                                   |                              | 16000        | 1630        | 2.44        | 1H -                                                                                | 6145DC       | - 104           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 2.59        |                                |                                   |                              | 22100        | 2250        | 2.89        | 1H -                                                                                | 6160DB       | - 104           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
| 22100                          | 2250                              | 2.59                         | 22100        | 2250        | 3.12        | 1H -                           | 6160DC                            | - 104                        | B-111        | B-127       | B-146       |                                                                                     |              |                 |                                                                                     |              |           |                                                                                     |  |           |  |  |
| 12.0                           | 789                               | 80.4                         | 525          | 53.5        | *           | 14.5                           | 654                               | 66.6                         | 525          | 53.5        | *           | 1H -                                                                                | 6120DB       | - 121           | B-108                                                                               | B-124        | B-143     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 622          | 63.4        | *           |                                |                                   |                              | 622          | 63.4        | *           | 1H -                                                                                | 6125DB       | - 121           | B-108                                                                               | B-124        | B-143     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 14700        | 1500        | 1.19        |                                |                                   |                              | 14700        | 1500        | 1.39        | 1H -                                                                                | 6135DB       | - 121           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.39        |                                |                                   |                              | 16000        | 1630        | 1.39        | 1H -                                                                                | 6140DB       | - 121           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.55        |                                |                                   |                              | 16000        | 1630        | 1.87        | 1H -                                                                                | 6140DC       | - 121           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.64        |                                |                                   |                              | 16000        | 1630        | 1.98        | 1H -                                                                                | 6145DC       | - 121           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 2.22        |                                |                                   |                              | 22100        | 2250        | 2.68        | 1H -                                                                                | 6160DB       | - 121           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 2.66        |                                |                                   |                              | 22100        | 2250        | 2.89        | 1H -                                                                                | 6165DB       | - 121           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 2.66        |                                |                                   |                              | 22100        | 2250        | 3.21        | 1H -                                                                                | 6165DC       | - 121           | B-111                                                                               | B-127        | B-146     |                                                                                     |  |           |  |  |
| 10.1                           | 932                               | 95.0                         | 630          | 64.2        | *           | 12.2                           | 773                               | 78.8                         | 630          | 64.2        | *           | 1H -                                                                                | 6125DB       | - 143           | B-108                                                                               | B-124        | B-143     |                                                                                     |  |           |  |  |
|                                |                                   |                              | <b>14700</b> | <b>1500</b> | <b>1.01</b> |                                |                                   |                              | <b>14700</b> | <b>1500</b> | <b>1.22</b> | <b>1H - 6135DB</b>                                                                  | <b>- 143</b> | <b>B-109</b>    | <b>B-125</b>                                                                        | <b>B-144</b> |           |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.31        |                                |                                   |                              | 16000        | 1630        | 1.39        | 1H -                                                                                | 6140DB       | - 143           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.31        |                                |                                   |                              | 16000        | 1630        | 1.59        | 1H -                                                                                | 6140DC       | - 143           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.39        |                                |                                   |                              | 16000        | 1630        | 1.39        | 1H -                                                                                | 6145DB       | - 143           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.47        |                                |                                   |                              | 16000        | 1630        | 1.77        | 1H -                                                                                | 6145DC       | - 143           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 1.88        |                                |                                   |                              | 22100        | 2250        | 2.27        | 1H -                                                                                | 6160DB       | - 143           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 2.25        |                                |                                   |                              | 22100        | 2250        | 2.72        | 1H -                                                                                | 6165DB       | - 143           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 29500        | 3010        | 2.71        |                                |                                   |                              | 29500        | 3010        | 2.89        | 1H -                                                                                | 6170DB       | - 143           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
| 29500                          | 3010                              | 2.71                         | 29500        | 3010        | 3.27        | 1H -                           | 6170DC                            | - 143                        | B-111        | B-127       | B-146       |                                                                                     |              |                 |                                                                                     |              |           |                                                                                     |  |           |  |  |
| 8.79                           | 1080                              | 110                          | 630          | 64.2        | *           | 10.6                           | 891                               | 90.9                         | 630          | 64.2        | *           | 1H -                                                                                | 6125DB       | - 165           | B-108                                                                               | B-124        | B-143     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 780          | 79.5        | *           |                                |                                   |                              | 780          | 79.5        | *           | 1H -                                                                                | 6130DB       | - 165           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 14700        | 1500        | 0.87        |                                |                                   |                              | 14700        | 1500        | 1.05        | 1H -                                                                                | 6135DB       | - 165           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.14        |                                |                                   |                              | 16000        | 1630        | 1.37        | 1H -                                                                                | 6140DB       | - 165           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.26        |                                |                                   |                              | 16000        | 1630        | 1.39        | 1H -                                                                                | 6145DB       | - 165           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 16000        | 1630        | 1.26        |                                |                                   |                              | 16000        | 1630        | 1.52        | 1H -                                                                                | 6145DC       | - 165           | B-109                                                                               | B-125        | B-144     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 1.39        |                                |                                   |                              | 22100        | 2250        | 1.39        | 1H -                                                                                | 6160DA       | - 165           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 1.63        |                                |                                   |                              | 22100        | 2250        | 1.97        | 1H -                                                                                | 6160DB       | - 165           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 22100        | 2250        | 1.95        |                                |                                   |                              | 22100        | 2250        | 2.36        | 1H -                                                                                | 6165DB       | - 165           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 29500        | 3010        | 2.35        |                                |                                   |                              | 29500        | 3010        | 2.84        | 1H -                                                                                | 6170DB       | - 165           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 29500        | 3010        | 2.89        |                                |                                   |                              | 29500        | 3010        | 2.89        | 1H -                                                                                | 6175DB       | - 165           | B-110                                                                               | B-126        | B-145     |                                                                                     |  |           |  |  |
|                                |                                   |                              | 29500        | 3010        | 2.93        |                                |                                   |                              | 29500        | 3010        | 3.53        | 1H -                                                                                | 6175DC       | - 165           | B-111                                                                               | B-127        | B-146     |                                                                                     |  |           |  |  |
|                                |                                   |                              |              |             |             |                                |                                   |                              |              |             |             |                                                                                     |              |                 |                                                                                     |              |           |                                                                                     |  |           |  |  |
|                                |                                   |                              |              |             |             |                                |                                   |                              |              |             |             |                                                                                     |              |                 |                                                                                     |              |           |                                                                                     |  |           |  |  |
|                                |                                   |                              |              |             |             |                                |                                   |                              |              |             |             |                                                                                     |              |                 |                                                                                     |              |           |                                                                                     |  |           |  |  |

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.



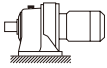
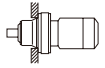






## Selection Tables Gearmotors

| 1.5 kW |  | n <sub>1</sub> : Motor Speed |       |      |     |      |      |  |  |  |
|--------|--|------------------------------|-------|------|-----|------|------|--|--|--|
|        |  | Hz                           |       | 50Hz |     | 60Hz |      |  |  |  |
|        |  | P                            |       | 4    | 6   | 4    | 6    |  |  |  |
|        |  | n <sub>1</sub>               | r/min | 1450 | 980 | 1750 | 1165 |  |  |  |


CHHM/CNHM
CHFM/CNFM
CVVM/CNVM

| 50Hz                                      |                                                    |                                           |             |            | 60Hz                                      |                                                    |                                           |    |  | Nomenclature   |                   |                 | Page of Dimension Sheet |              |              |
|-------------------------------------------|----------------------------------------------------|-------------------------------------------|-------------|------------|-------------------------------------------|----------------------------------------------------|-------------------------------------------|----|--|----------------|-------------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF          |            | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF |  | Input Capacity | Symbol Frame Size | Reduction Ratio | CNHM                    | CNFM         | CNVM         |
| 132                                       | 103                                                | 10.5                                      | <b>3340</b> | <b>340</b> | 159                                       | 85.5                                               | 8.72                                      |    |  | 2 -            | 6095              | - 11            | <b>B-100</b>            | <b>B-116</b> | <b>B-135</b> |
|                                           |                                                    |                                           | 5220        | 532        |                                           |                                                    |                                           |    |  |                |                   |                 | B-101                   | B-117        | B-136        |
|                                           |                                                    |                                           | 5220        | 532        |                                           |                                                    |                                           |    |  |                |                   |                 | B-101                   | B-117        | B-136        |
|                                           |                                                    |                                           | 5950        | 606        |                                           |                                                    |                                           |    |  |                |                   |                 | B-101                   | B-117        | B-136        |
|                                           |                                                    |                                           | 5950        | 606        |                                           |                                                    |                                           |    |  |                |                   |                 | B-101                   | B-117        | B-136        |
| 112                                       | 122                                                | 12.4                                      | <b>3340</b> | <b>340</b> | 135                                       | 101                                                | 10.3                                      |    |  | 2 -            | 6095              | - 13            | <b>B-100</b>            | <b>B-116</b> | <b>B-135</b> |
|                                           |                                                    |                                           | 5400        | 550        |                                           |                                                    |                                           |    |  |                |                   |                 | B-101                   | B-117        | B-136        |
|                                           |                                                    |                                           | 5400        | 550        |                                           |                                                    |                                           |    |  |                |                   |                 | B-101                   | B-117        | B-136        |
|                                           |                                                    |                                           | 6150        | 627        |                                           |                                                    |                                           |    |  |                |                   |                 | B-101                   | B-117        | B-136        |
|                                           |                                                    |                                           | 6150        | 627        |                                           |                                                    |                                           |    |  |                |                   |                 | B-101                   | B-117        | B-136        |

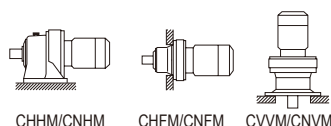
- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.







## Selection Tables Gearmotors



n: Motor Speed

| 1.5 kW | Hz                   | 50Hz |     | 60Hz |      |
|--------|----------------------|------|-----|------|------|
|        | P                    | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> r/min | 1450 | 980 | 1750 | 1165 |

| 50Hz                           |                                   |         |                              |             |             | 60Hz                           |                                   |         |                              |             |             | Nomenclature   |                   |                 | Page of Dimension Sheet |              |              |
|--------------------------------|-----------------------------------|---------|------------------------------|-------------|-------------|--------------------------------|-----------------------------------|---------|------------------------------|-------------|-------------|----------------|-------------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> |         | Allowable Radial Load<br>Pro |             | SF          | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> |         | Allowable Radial Load<br>Pro |             | SF          | Input Capacity | Symbol Frame Size | Reduction Ratio | CNHM                    | CNFM         | CNVM         |
| [r/min]                        | [N·m]                             | [kgf·m] | [N]                          | [kgf]       |             | [r/min]                        | [N·m]                             | [kgf·m] | [N]                          | [kgf]       |             |                |                   |                 | CHHM                    | CHFM         | CVVM         |
| 3.85                           | 2100                              | 214     | 22100                        | 2250        | *           | 4.64                           | 2100                              | 214     | 22100                        | 2250        | *           | 2 -            | 6165DA            | - 377           | B-110                   | B-126        | B-145        |
|                                | 2530                              | 258     | 29500                        | 3010        | *           |                                | 2530                              | 258     | 29500                        | 3010        | *           | 2 -            | 6170DA            | - 377           | B-110                   | B-126        | B-145        |
|                                | 3350                              | 342     | 29500                        | 3010        | 0.94        |                                | 2780                              | 283     | 29500                        | 3010        | 1.02        | 2 -            | 6175DA            | - 377           | B-110                   | B-126        | B-145        |
|                                |                                   |         | 29500                        | 3010        | 0.94        |                                |                                   |         | 29500                        | 3010        | 1.13        | 2 -            | 6175DB            | - 377           | B-110                   | B-126        | B-145        |
|                                |                                   |         | 41700                        | 4250        | 1.21        |                                |                                   |         | 41700                        | 4250        | 1.46        | 2 -            | 6180DA            | - 377           | B-110                   | B-126        | B-145        |
|                                |                                   |         | 41700                        | 4250        | 1.49        |                                |                                   |         | 41700                        | 4250        | 1.80        | 2 -            | 6185DA            | - 377           | B-110                   | B-126        | B-145        |
|                                |                                   |         | 59000                        | 6010        | 1.90        |                                |                                   |         | 59000                        | 6010        | 2.30        | 2 -            | 6190DA            | - 377           | B-111                   | B-128        | B-147        |
|                                |                                   |         | 59000                        | 6010        | 2.37        |                                |                                   |         | 59000                        | 6010        | 2.87        | 2 -            | 6195DA            | - 377           | B-111                   | B-128        | B-147        |
| 3.07                           | 3150                              | 321     | 29500                        | 3010        | *           | 3.70                           | 3150                              | 321     | 29500                        | 3010        | *           | 2 -            | 6175DA            | - 473           | B-110                   | B-126        | B-145        |
|                                | 4210                              | 429     | 41700                        | 4250        | 1.19        |                                | 41700                             | 4250    | 1.43                         | 2 -         | 6185DA      | - 473          | B-110             | B-126           | B-145                   |              |              |
|                                |                                   |         | 59000                        | 6010        | 1.52        |                                | 59000                             | 6010    | 1.83                         | 2 -         | 6190DA      | - 473          | B-111             | B-128           | B-147                   |              |              |
|                                |                                   |         | 59000                        | 6010        | 1.89        |                                | 59000                             | 6010    | 2.28                         | 2 -         | 6195DA      | - 473          | B-111             | B-128           | B-147                   |              |              |
| 2.59                           | 3150                              | 321     | 29500                        | 3010        | *           | 3.13                           | 3150                              | 321     | 29500                        | 3010        | *           | 2 -            | 6175DA            | - 559           | B-110                   | B-126        | B-145        |
|                                | 4060                              | 414     | 41700                        | 4250        | *           |                                | 4060                              | 414     | 41700                        | 4250        | *           | 2 -            | 6180DA            | - 559           | B-110                   | B-126        | B-145        |
|                                | 4970                              | 507     | <b>41700</b>                 | <b>4250</b> | <b>1.01</b> |                                | 4120                              | 420     | <b>41700</b>                 | <b>4250</b> | <b>1.21</b> | <b>2 -</b>     | <b>6185DA</b>     | <b>- 559</b>    | <b>B-110</b>            | <b>B-126</b> | <b>B-145</b> |
|                                |                                   |         | 59000                        | 6010        | 1.28        |                                |                                   |         | 59000                        | 6010        | 1.55        | 2 -            | 6190DA            | - 559           | B-111                   | B-128        | B-147        |
| 59000                          | 6010                              | 1.60    | 59000                        | 6010        | 1.93        | 2 -                            | 6195DA                            | - 559   | B-111                        | B-128       | B-147       |                |                   |                 |                         |              |              |
| 2.23                           | 4050                              | 413     | 41700                        | 4250        | *           | 2.70                           | 4050                              | 413     | 41700                        | 4250        | *           | 2 -            | 6180DA            | - 649           | B-110                   | B-126        | B-145        |
|                                | 5770                              | 588     | 41300                        | 4210        | 0.87        |                                | 41700                             | 4250    | 1.05                         | 2 -         | 6185DA      | - 649          | B-110             | B-126           | B-145                   |              |              |
|                                |                                   |         | 58700                        | 5990        | 1.11        |                                | 59000                             | 6010    | 1.33                         | 2 -         | 6190DA      | - 649          | B-111             | B-128           | B-147                   |              |              |
|                                |                                   |         | 58700                        | 5990        | 1.38        |                                | 59000                             | 6010    | 1.66                         | 2 -         | 6195DA      | - 649          | B-111             | B-128           | B-147                   |              |              |
| 1.98                           | 4060                              | 414     | 41700                        | 4250        | *           | 2.39                           | 4060                              | 414     | 41700                        | 4250        | *           | 2 -            | 6180DA            | - 731           | B-110                   | B-126        | B-145        |
|                                | 5000                              | 510     | 41700                        | 4250        | *           |                                | 5000                              | 510     | 41700                        | 4250        | *           | 2 -            | 6185DA            | - 731           | B-110                   | B-126        | B-145        |
|                                | 6500                              | 663     | 59000                        | 6010        | 1.22        |                                | 5390                              | 549     | 59000                        | 6010        | 1.48        | 2 -            | 6195DA            | - 731           | B-111                   | B-128        | B-147        |
| 1.72                           | 5000                              | 510     | 41700                        | 4250        | *           | 2.08                           | 5000                              | 510     | 41700                        | 4250        | *           | 2 -            | 6185DA            | - 841           | B-110                   | B-126        | B-145        |
|                                | 7480                              | 762     | <b>59000</b>                 | <b>6010</b> | <b>1.06</b> |                                | 6200                              | 632     | <b>59000</b>                 | <b>6010</b> | <b>1.28</b> | <b>2 -</b>     | <b>6195DA</b>     | <b>- 841</b>    | <b>B-111</b>            | <b>B-128</b> | <b>B-147</b> |
|                                |                                   |         | 59000                        | 6010        | 1.06        |                                |                                   |         | 59000                        | 6010        | 1.28        | 2 -            | 6195DB            | - 841           | B-112                   | B-128        | B-147        |
| 1.45                           | 6380                              | 650     | 58600                        | 5970        | *           | 1.74                           | 6380                              | 650     | 58600                        | 5970        | *           | 2 -            | 6190DA            | - 1003          | B-111                   | B-128        | B-147        |
|                                | 8920                              | 909     | 57900                        | 5900        | 0.89        |                                | 7390                              | 753     | 58300                        | 5940        | 1.08        | 2 -            | 6195DA            | - 1003          | B-111                   | B-128        | B-147        |
| 1.16                           | 7960                              | 811     | 59000                        | 6010        | *           | 1.40                           | 7960                              | 811     | 59000                        | 6010        | *           | 2 -            | 6195DA            | - 1247          | B-111                   | B-128        | B-147        |
| 0.980                          | 8760                              | 893     | 84100                        | 8570        | *           | 1.18                           | 8360                              | 853     | 84100                        | 8570        | *           | 2 -            | 6205DA            | - 1479          | B-112                   | B-129        | B-148        |
|                                | 13200                             | 1340    | 104000                       | 10600       | 0.86        |                                | 10900                             | 1110    | 104000                       | 10600       | 1.03        | 2 -            | 6215DA            | - 1479          | B-112                   | B-129        | B-148        |
| 0.784                          | 9300                              | 948     | 84100                        | 8570        | *           | 0.946                          | 9300                              | 948     | 84100                        | 8570        | *           | 2 -            | 6205DA            | - 1849          | B-112                   | B-129        | B-148        |
|                                | 12700                             | 1290    | 104000                       | 10600       | *           |                                | 12700                             | 1290    | 104000                       | 10600       | *           | 2 -            | 6215DA            | - 1849          | B-112                   | B-129        | B-148        |
|                                | 16400                             | 1680    | 145000                       | 14800       | 0.97        |                                | 13600                             | 1390    | 145000                       | 14800       | 1.17        | 2 -            | 6225DA            | - 1849          | B-113                   | B-130        | B-149        |
| 0.702                          | 9300                              | 948     | 84100                        | 8570        | *           | 0.847                          | 9300                              | 948     | 84100                        | 8570        | *           | 2 -            | 6205DA            | - 2065          | B-112                   | B-129        | B-148        |
|                                | 12700                             | 1290    | 104000                       | 10600       | *           |                                | 12700                             | 1290    | 104000                       | 10600       | *           | 2 -            | 6215DA            | - 2065          | B-112                   | B-129        | B-148        |
|                                | 18400                             | 1870    | 145000                       | 14800       | 0.86        |                                | 15200                             | 1550    | 145000                       | 14800       | 1.04        | 2 -            | 6225DA            | - 2065          | B-113                   | B-130        | B-149        |
| 0.572                          | 12700                             | 1290    | 104000                       | 10600       | *           | 0.690                          | 12700                             | 1290    | 104000                       | 10600       | *           | 2 -            | 6215DA            | - 2537          | B-112                   | B-129        | B-148        |
|                                | 15900                             | 1620    | 145000                       | 14800       | *           |                                | 15900                             | 1620    | 145000                       | 14800       | *           | 2 -            | 6225DA            | - 2537          | B-113                   | B-130        | B-149        |
| 0.476                          | 11300                             | 1150    | 104000                       | 10600       | *           | 0.575                          | 11300                             | 1150    | 104000                       | 10600       | *           | 2 -            | 6215DA            | - 3045          | B-112                   | B-129        | B-148        |
|                                | 15100                             | 1540    | 145000                       | 14800       | *           |                                | 15100                             | 1540    | 145000                       | 14800       | *           | 2 -            | 6225DA            | - 3045          | B-113                   | B-130        | B-149        |
| 0.417                          | 12700                             | 1290    | 104000                       | 10600       | *           | 0.503                          | 12700                             | 1290    | 104000                       | 10600       | *           | 2 -            | 6215DA            | - 3481          | B-112                   | B-129        | B-148        |
|                                | 15900                             | 1620    | 145000                       | 14800       | *           |                                | 15900                             | 1620    | 145000                       | 14800       | *           | 2 -            | 6225DA            | - 3481          | B-113                   | B-130        | B-149        |
| 0.327                          | 11300                             | 1150    | 104000                       | 10600       | *           | 0.394                          | 11300                             | 1150    | 104000                       | 10600       | *           | 2 -            | 6215DA            | - 4437          | B-112                   | B-129        | B-148        |
|                                | 15100                             | 1540    | 145000                       | 14800       | *           |                                | 15100                             | 1540    | 145000                       | 14800       | *           | 2 -            | 6225DA            | - 4437          | B-113                   | B-130        | B-149        |
| 0.282                          | 12700                             | 1290    | 104000                       | 10600       | *           | 0.341                          | 12700                             | 1290    | 104000                       | 10600       | *           | 2 -            | 6215DA            | - 5133          | B-112                   | B-129        | B-148        |
|                                | 15900                             | 1620    | 145000                       | 14800       | *           |                                | 15900                             | 1620    | 145000                       | 14800       | *           | 2 -            | 6225DA            | - 5133          | B-113                   | B-130        | B-149        |

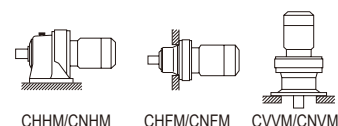
GEARMOTORS

Selection Tables  
1.5 kW

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

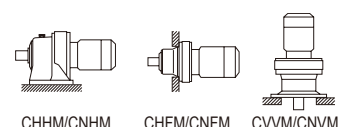
## Selection Tables Gearmotors

| 1.5 kW | Hz             |       | 50Hz |     | 60Hz |      |
|--------|----------------|-------|------|-----|------|------|
|        | P              |       | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |



| 50Hz                           |                                   |                              |        |       | 60Hz                           |                                   |                              |        |       | Nomenclature   |                   |                 | Page of Dimension Sheet |       |       |
|--------------------------------|-----------------------------------|------------------------------|--------|-------|--------------------------------|-----------------------------------|------------------------------|--------|-------|----------------|-------------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    | Input Capacity | Symbol Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVM  |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |                |                   |                 | CHHM                    | CHF   | CVVM  |
| 0.235                          | 11300                             | 1150                         | 104000 | 10600 | 0.283                          | 11300                             | 1150                         | 104000 | 10600 | 2              | - 6215DA          | - 6177          | B-112                   | B-129 | B-148 |
|                                | 15100                             | 1540                         | 145000 | 14800 |                                | 15100                             | 1540                         | 145000 | 14800 | 2              | - 6225DA          | - 6177          | B-113                   | B-130 | B-149 |
| 0.192                          | 11300                             | 1150                         | 104000 | 10600 | 0.231                          | 11300                             | 1150                         | 104000 | 10600 | 2              | - 6215DA          | - 7569          | B-112                   | B-129 | B-148 |
|                                | 15100                             | 1540                         | 145000 | 14800 |                                | 15100                             | 1540                         | 145000 | 14800 | 2              | - 6225DA          | - 7569          | B-113                   | B-130 | B-149 |

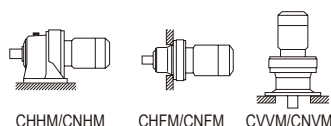
| 2.2 kW | Hz             |       | 50Hz |     | 60Hz |      |
|--------|----------------|-------|------|-----|------|------|
|        | P              |       | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |



| 50Hz                           |                                   |                              |             |            | 60Hz                           |                                   |                              |      |       | Nomenclature   |                   |                 | Page of Dimension Sheet |              |              |
|--------------------------------|-----------------------------------|------------------------------|-------------|------------|--------------------------------|-----------------------------------|------------------------------|------|-------|----------------|-------------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |             | SF         | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |      | SF    | Input Capacity | Symbol Frame Size | Reduction Ratio | CNHM                    | CNFM         | CNVM         |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]         | [kgf]      | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]  | [kgf] |                |                   |                 | CHHM                    | CHF          | CVVM         |
| 580                            | 34.4                              | 3.51                         | <b>2050</b> | <b>209</b> | <b>1.09</b>                    | 700                               | 28.5                         | 2.91 |       | 3              | - 6090SK          | - 2.5 (K)       | <b>B-98</b>             | -            | <b>B-133</b> |
|                                |                                   |                              | 2050        | 209        | 1.23                           |                                   |                              |      |       | 3              | - 6095SK          | - 2.5 (K)       | B-98                    | -            | B-133        |
|                                |                                   |                              | 2050        | 209        | 1.45                           |                                   |                              |      |       | 3              | - 6100SK          | - 2.5 (K)       | B-99                    | -            | B-134        |
|                                |                                   |                              | 2050        | 209        | 1.70                           |                                   |                              |      |       | 3              | - 6105SK          | - 2.5 (K)       | B-99                    | -            | B-134        |
|                                |                                   |                              | 2790        | 284        | 2.34                           |                                   |                              |      |       | 3              | - 6110SK          | - 2.5 (K)       | B-99                    | -            | B-134        |
|                                |                                   |                              | 2790        | 284        | 2.93                           |                                   |                              |      |       | 3              | - 6115SK          | - 2.5 (K)       | B-99                    | -            | B-134        |
| 483                            | 41.3                              | 4.21                         | <b>2120</b> | <b>216</b> | <b>1.06</b>                    | 583                               | 34.2                         | 3.49 |       | 3              | - 6090SK          | - 3 (K)         | <b>B-98</b>             | -            | <b>B-133</b> |
|                                |                                   |                              | 2120        | 216        | 1.20                           |                                   |                              |      |       | 3              | - 6095SK          | - 3 (K)         | B-98                    | -            | B-133        |
|                                |                                   |                              | 2120        | 216        | 1.50                           |                                   |                              |      |       | 3              | - 6100SK          | - 3 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 2120        | 216        | 1.76                           |                                   |                              |      |       | 3              | - 6105SK          | - 3 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 2960        | 302        | 2.40                           |                                   |                              |      |       | 3              | - 6110SK          | - 3 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 2960        | 302        | 3.00                           |                                   |                              |      |       | 3              | - 6115SK          | - 3 (K)         | B-99                    | -            | B-134        |
| 363                            | 55.1                              | 5.61                         | <b>2300</b> | <b>234</b> | <b>1.06</b>                    | 438                               | 45.6                         | 4.65 |       | 3              | - 6090SK          | - 4 (K)         | <b>B-98</b>             | -            | <b>B-133</b> |
|                                |                                   |                              | 2300        | 234        | 1.20                           |                                   |                              |      |       | 3              | - 6095SK          | - 4 (K)         | B-98                    | -            | B-133        |
|                                |                                   |                              | 2300        | 234        | 1.46                           |                                   |                              |      |       | 3              | - 6100SK          | - 4 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 2300        | 234        | 1.72                           |                                   |                              |      |       | 3              | - 6105SK          | - 4 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 3170        | 323        | 2.43                           |                                   |                              |      |       | 3              | - 6110SK          | - 4 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 3170        | 323        | 3.04                           |                                   |                              |      |       | 3              | - 6115SK          | - 4 (K)         | B-99                    | -            | B-134        |
| 290                            | 68.8                              | 7.02                         | <b>2420</b> | <b>247</b> | <b>1.02</b>                    | 350                               | 57.0                         | 5.81 |       | 3              | - 6090SK          | - 5 (K)         | <b>B-98</b>             | -            | <b>B-133</b> |
|                                |                                   |                              | 2420        | 247        | 1.20                           |                                   |                              |      |       | 3              | - 6095SK          | - 5 (K)         | B-98                    | -            | B-133        |
|                                |                                   |                              | 2420        | 247        | 1.43                           |                                   |                              |      |       | 3              | - 6100SK          | - 5 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 2420        | 247        | 1.68                           |                                   |                              |      |       | 3              | - 6105SK          | - 5 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 3330        | 339        | 2.09                           |                                   |                              |      |       | 3              | - 6110SK          | - 5 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 3330        | 339        | 2.62                           |                                   |                              |      |       | 3              | - 6115SK          | - 5 (K)         | B-99                    | -            | B-134        |
| 242                            | 82.6                              | 8.42                         | <b>2410</b> | <b>246</b> | <b>1.03</b>                    | 292                               | 68.4                         | 6.98 |       | 3              | - 6095SK          | - 6 (K)         | <b>B-98</b>             | -            | <b>B-133</b> |
|                                |                                   |                              | 2410        | 246        | 1.21                           |                                   |                              |      |       | 3              | - 6100SK          | - 6 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 2410        | 246        | 1.43                           |                                   |                              |      |       | 3              | - 6105SK          | - 6 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 3520        | 359        | 1.92                           |                                   |                              |      |       | 3              | - 6110SK          | - 6 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | 3520        | 359        | 2.40                           |                                   |                              |      |       | 3              | - 6115SK          | - 6 (K)         | B-99                    | -            | B-134        |
|                                |                                   |                              | <b>4090</b> | <b>417</b> | <b>1.07</b>                    |                                   |                              |      |       | 3              | - 6100            | - 6             | <b>B-101</b>            | <b>B-117</b> | <b>B-136</b> |
|                                |                                   |                              | 4090        | 417        | 1.45                           |                                   |                              |      |       | 3              | - 6105            | - 6             | B-101                   | B-117        | B-136        |
|                                |                                   |                              | 4640        | 473        | 1.61                           |                                   |                              |      |       | 3              | - 6110            | - 6             | B-101                   | B-117        | B-136        |
|                                |                                   |                              | 4640        | 473        | 1.78                           |                                   |                              |      |       | 3              | - 6115            | - 6             | B-101                   | B-117        | B-136        |
|                                |                                   |                              | 5260        | 536        | 2.30                           |                                   |                              |      |       | 3              | - 6120            | - 6             | B-101                   | B-117        | B-136        |

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHF, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors

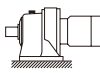
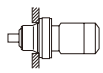


|        |                |       |      |     |      |      |
|--------|----------------|-------|------|-----|------|------|
| 2.2 kW | Hz             |       | 50Hz |     | 60Hz |      |
|        | P              |       | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

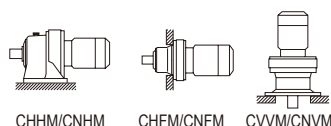
n: Motor Speed

| 50Hz                           |                       |         |                              |            |             | 60Hz                           |                       |         |                              |            |             | Nomenclature   |                   |                 | Page of Dimension Sheet |           |      |              |              |              |
|--------------------------------|-----------------------|---------|------------------------------|------------|-------------|--------------------------------|-----------------------|---------|------------------------------|------------|-------------|----------------|-------------------|-----------------|-------------------------|-----------|------|--------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |            | SF          | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |            | SF          | Input Capacity | Symbol Frame Size | Reduction Ratio | CNHM                    | CNFM      | CNVM |              |              |              |
| [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf]      |             | [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf]      |             |                |                   |                 | CHHM                    | CHFM      | CVVM |              |              |              |
| 181                            | 110                   | 11.2    | 2540                         | 259        | 0.80        | 219                            | 91.2                  | 9.30    | 2500                         | 255        | 0.80        | 3              | -                 | 6095SK          | -                       | 8         | (K)  | B-98         | -            | B-133        |
|                                |                       |         | <b>2540</b>                  | <b>259</b> | <b>1.13</b> |                                |                       |         | <b>2500</b>                  | <b>255</b> | <b>1.13</b> | <b>3</b>       | -                 | <b>6105SK</b>   | -                       | <b>8</b>  | (K)  | <b>B-99</b>  | -            | <b>B-134</b> |
|                                |                       |         | 3730                         | 380        | 1.68        |                                |                       |         | 3580                         | 365        | 1.68        | 3              | -                 | 6110SK          | -                       | 8         | (K)  | B-99         | -            | B-134        |
|                                |                       |         | 3730                         | 380        | 2.10        |                                |                       |         | 3580                         | 365        | 2.10        | 3              | -                 | 6115SK          | -                       | 8         | (K)  | B-99         | -            | B-134        |
|                                |                       |         | <b>4560</b>                  | <b>465</b> | <b>1.07</b> |                                |                       |         | <b>4300</b>                  | <b>438</b> | <b>1.07</b> | <b>3</b>       | -                 | <b>6100</b>     | -                       | <b>8</b>  |      | <b>B-101</b> | <b>B-117</b> | <b>B-136</b> |
|                                |                       |         | 4560                         | 465        | 1.45        |                                |                       |         | 4300                         | 438        | 1.45        | 3              | -                 | 6105            | -                       | 8         |      | B-101        | B-117        | B-136        |
|                                |                       |         | 5170                         | 527        | 1.61        |                                |                       |         | 4870                         | 496        | 1.61        | 3              | -                 | 6110            | -                       | 8         |      | B-101        | B-117        | B-136        |
|                                |                       |         | 5170                         | 527        | 1.78        |                                |                       |         | 4870                         | 496        | 1.78        | 3              | -                 | 6115            | -                       | 8         |      | B-101        | B-117        | B-136        |
| 5870                           | 598                   | 2.30    | 5520                         | 563        | 2.30        | 3                              | -                     | 6120    | -                            | 8          |             | B-101          | B-117             | B-136           |                         |           |      |              |              |              |
| 145                            | 138                   | 14.0    | 2610                         | 266        | 0.80        | 175                            | 114                   | 11.6    | 2580                         | 263        | 0.80        | 3              | -                 | 6095SK          | -                       | 10        | (K)  | B-98         | -            | B-133        |
|                                |                       |         | <b>2610</b>                  | <b>266</b> | <b>1.00</b> |                                |                       |         | <b>2580</b>                  | <b>263</b> | <b>1.00</b> | <b>3</b>       | -                 | <b>6105SK</b>   | -                       | <b>10</b> | (K)  | <b>B-99</b>  | -            | <b>B-134</b> |
|                                |                       |         | 3960                         | 404        | 1.39        |                                |                       |         | 3820                         | 389        | 1.39        | 3              | -                 | 6110SK          | -                       | 10        | (K)  | B-99         | -            | B-134        |
|                                |                       |         | 3960                         | 404        | 1.74        |                                |                       |         | 3820                         | 389        | 1.74        | 3              | -                 | 6115SK          | -                       | 10        | (K)  | B-99         | -            | B-134        |
| 132                            | 151                   | 15.4    | <b>5170</b>                  | <b>527</b> | <b>1.07</b> | 159                            | 125                   | 12.8    | <b>4870</b>                  | <b>497</b> | <b>1.07</b> | <b>3</b>       | -                 | <b>6100</b>     | -                       | <b>11</b> |      | <b>B-101</b> | <b>B-117</b> | <b>B-136</b> |
|                                |                       |         | 5170                         | 527        | 1.45        |                                |                       |         | 4870                         | 497        | 1.45        | 3              | -                 | 6105            | -                       | 11        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 5900                         | 601        | 1.61        |                                |                       |         | 5560                         | 567        | 1.61        | 3              | -                 | 6110            | -                       | 11        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 5900                         | 601        | 1.78        |                                |                       |         | 5560                         | 567        | 1.78        | 3              | -                 | 6115            | -                       | 11        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6670                         | 680        | 2.30        |                                |                       |         | 6280                         | 640        | 2.30        | 3              | -                 | 6120            | -                       | 11        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6670                         | 680        | 2.69        |                                |                       |         | 6280                         | 640        | 2.69        | 3              | -                 | 6125            | -                       | 11        |      | B-101        | B-117        | B-136        |
| 112                            | 179                   | 18.2    | <b>5360</b>                  | <b>547</b> | <b>1.07</b> | 135                            | 148                   | 15.1    | <b>5060</b>                  | <b>516</b> | <b>1.07</b> | <b>3</b>       | -                 | <b>6100</b>     | -                       | <b>13</b> |      | <b>B-101</b> | <b>B-117</b> | <b>B-136</b> |
|                                |                       |         | 5360                         | 547        | 1.45        |                                |                       |         | 5060                         | 516        | 1.45        | 3              | -                 | 6105            | -                       | 13        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6090                         | 621        | 1.61        |                                |                       |         | 5740                         | 586        | 1.61        | 3              | -                 | 6110            | -                       | 13        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6090                         | 621        | 1.77        |                                |                       |         | 5740                         | 586        | 1.77        | 3              | -                 | 6115            | -                       | 13        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6890                         | 702        | 2.30        |                                |                       |         | 6490                         | 662        | 2.30        | 3              | -                 | 6120            | -                       | 13        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6890                         | 702        | 2.69        |                                |                       |         | 6490                         | 662        | 2.69        | 3              | -                 | 6125            | -                       | 13        |      | B-101        | B-117        | B-136        |
| 96.7                           | 206                   | 21.0    | <b>5400</b>                  | <b>550</b> | <b>1.07</b> | 117                            | 171                   | 17.4    | <b>5340</b>                  | <b>544</b> | <b>1.07</b> | <b>3</b>       | -                 | <b>6100</b>     | -                       | <b>15</b> |      | <b>B-101</b> | <b>B-117</b> | <b>B-136</b> |
|                                |                       |         | 5400                         | 550        | 1.45        |                                |                       |         | 5340                         | 544        | 1.45        | 3              | -                 | 6105            | -                       | 15        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6490                         | 662        | 1.61        |                                |                       |         | 6120                         | 624        | 1.61        | 3              | -                 | 6110            | -                       | 15        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6490                         | 662        | 1.77        |                                |                       |         | 6120                         | 624        | 1.77        | 3              | -                 | 6115            | -                       | 15        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 7390                         | 753        | 2.30        |                                |                       |         | 6960                         | 710        | 2.30        | 3              | -                 | 6120            | -                       | 15        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 7390                         | 753        | 2.69        |                                |                       |         | 6960                         | 710        | 2.69        | 3              | -                 | 6125            | -                       | 15        |      | B-101        | B-117        | B-136        |
| 85.3                           | 234                   | 23.9    | <b>5400</b>                  | <b>550</b> | <b>1.12</b> | 103                            | 194                   | 19.8    | <b>5400</b>                  | <b>550</b> | <b>1.12</b> | <b>3</b>       | -                 | <b>6105</b>     | -                       | <b>17</b> |      | <b>B-101</b> | <b>B-117</b> | <b>B-136</b> |
|                                |                       |         | 6550                         | 668        | 1.45        |                                |                       |         | 6180                         | 630        | 1.45        | 3              | -                 | 6110            | -                       | 17        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6550                         | 668        | 1.77        |                                |                       |         | 6180                         | 630        | 1.77        | 3              | -                 | 6115            | -                       | 17        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 7460                         | 760        | 2.22        |                                |                       |         | 7030                         | 716        | 2.30        | 3              | -                 | 6120            | -                       | 17        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 7460                         | 760        | 2.57        |                                |                       |         | 7030                         | 716        | 2.57        | 3              | -                 | 6125            | -                       | 17        |      | B-101        | B-117        | B-136        |
| 69.0                           | 289                   | 29.5    | <b>5400</b>                  | <b>550</b> | <b>1.04</b> | 83.3                           | 240                   | 24.4    | <b>5400</b>                  | <b>550</b> | <b>1.06</b> | <b>3</b>       | -                 | <b>6105</b>     | -                       | <b>21</b> |      | <b>B-101</b> | <b>B-117</b> | <b>B-136</b> |
|                                |                       |         | 6920                         | 706        | 1.24        |                                |                       |         | 6540                         | 667        | 1.24        | 3              | -                 | 6110            | -                       | 21        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 6920                         | 706        | 1.41        |                                |                       |         | 6540                         | 667        | 1.41        | 3              | -                 | 6115            | -                       | 21        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 8180                         | 834        | 1.80        |                                |                       |         | 7710                         | 786        | 1.80        | 3              | -                 | 6120            | -                       | 21        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 8180                         | 834        | 2.18        |                                |                       |         | 7710                         | 786        | 2.22        | 3              | -                 | 6125            | -                       | 21        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 9580                         | 976        | 2.70        |                                |                       |         | 9020                         | 919        | 2.79        | 3              | -                 | 6130            | -                       | 21        |      | B-102        | B-118        | B-137        |
| 58.0                           | 344                   | 35.1    | <b>7010</b>                  | <b>715</b> | <b>1.01</b> | 70.0                           | 285                   | 29.1    | <b>6620</b>                  | <b>675</b> | <b>1.01</b> | <b>3</b>       | -                 | <b>6115</b>     | -                       | <b>25</b> |      | <b>B-101</b> | <b>B-117</b> | <b>B-136</b> |
|                                |                       |         | 8560                         | 873        | 1.40        |                                |                       |         | 8070                         | 823        | 1.40        | 3              | -                 | 6120            | -                       | 25        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 8560                         | 873        | 1.80        |                                |                       |         | 8070                         | 823        | 1.80        | 3              | -                 | 6125            | -                       | 25        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 9950                         | 1010       | 2.27        |                                |                       |         | 9370                         | 955        | 2.35        | 3              | -                 | 6130            | -                       | 25        |      | B-102        | B-118        | B-137        |
|                                |                       |         | 9950                         | 1010       | 2.61        |                                |                       |         | 9370                         | 955        | 2.70        | 3              | -                 | 6135            | -                       | 25        |      | B-102        | B-118        | B-137        |
| 50.0                           | 399                   | 40.7    | <b>7160</b>                  | <b>730</b> | <b>1.01</b> | 60.3                           | 331                   | 33.7    | <b>6800</b>                  | <b>693</b> | <b>1.01</b> | <b>3</b>       | -                 | <b>6115</b>     | -                       | <b>29</b> |      | <b>B-101</b> | <b>B-117</b> | <b>B-136</b> |
|                                |                       |         | 8880                         | 905        | 1.30        |                                |                       |         | 8380                         | 854        | 1.36        | 3              | -                 | 6120            | -                       | 29        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 8880                         | 905        | 1.58        |                                |                       |         | 8380                         | 854        | 1.71        | 3              | -                 | 6125            | -                       | 29        |      | B-101        | B-117        | B-136        |
|                                |                       |         | 10500                        | 1070       | 1.95        |                                |                       |         | 9850                         | 1000       | 2.04        | 3              | -                 | 6130            | -                       | 29        |      | B-102        | B-118        | B-137        |
|                                |                       |         | 10500                        | 1070       | 2.22        |                                |                       |         | 9850                         | 1000       | 2.56        | 3              | -                 | 6135            | -                       | 29        |      | B-102        | B-118        | B-137        |
|                                |                       |         | 15000                        | 1530       | 2.70        |                                |                       |         | 14200                        | 1450       | 2.70        | 3              | -                 | 6140            | -                       | 29        |      | B-102        | B-118        | B-137        |
|                                |                       |         |                              |            |             |                                |                       |         |                              |            |             |                |                   |                 |                         |           |      |              |              |              |

## Selection Tables Gearmotors

| 2.2 kW                                    |                                | n <sub>1</sub> : Motor Speed     |                                     |                                       |       |                                           |                                |  |                                     |                                       |  |                |                         |  |              |              |              |       |       |       |       |
|-------------------------------------------|--------------------------------|----------------------------------|-------------------------------------|---------------------------------------|-------|-------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------------------------------------------------------|----------------|-------------------------|-------------------------------------------------------------------------------------|--------------|--------------|--------------|-------|-------|-------|-------|
|                                           |                                | Hz                               |                                     | 50Hz                                  |       | 60Hz                                      |                                |                                                                                     |                                     |                                       |                                                                                     |                |                         |                                                                                     |              |              |              |       |       |       |       |
|                                           |                                | P                                |                                     | 4                                     | 6     | 4                                         | 6                              |                                                                                     |                                     |                                       |                                                                                     |                |                         |                                                                                     |              |              |              |       |       |       |       |
| n <sub>1</sub>                            |                                | r/min                            |                                     | 1450                                  | 980   | 1750                                      | 1165                           |                                                                                     |                                     |                                       |                                                                                     |                |                         |                                                                                     |              |              |              |       |       |       |       |
| 50Hz                                      |                                |                                  |                                     |                                       | 60Hz  |                                           |                                |                                                                                     |                                     | Nomenclature                          |                                                                                     |                | Page of Dimension Sheet |                                                                                     |              |              |              |       |       |       |       |
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] | Output Torque<br>Tout<br>[kgf·m] | Allowable Radial Load<br>Pro<br>[N] | Allowable Radial Load<br>Pro<br>[kgf] | SF    | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] | Output Torque<br>Tout<br>[kgf·m]                                                    | Allowable Radial Load<br>Pro<br>[N] | Allowable Radial Load<br>Pro<br>[kgf] | SF                                                                                  | Input Capacity | Symbol<br>Frame Size    | Reduction Ratio                                                                     | CNHM<br>CHHM | CNFM<br>CHFM | CNVM<br>CVVM |       |       |       |       |
| 41.4                                      | 482                            | 49.1                             | 4960                                | 506                                   | 0.82  | 50.0                                      | 399                            | 40.7                                                                                | 7230                                | 737                                   | 0.82                                                                                | 3 -            | 6115                    | - 35                                                                                | B-101        | B-117        | B-136        |       |       |       |       |
|                                           |                                |                                  | 9350                                | 954                                   | 1.08  |                                           |                                |                                                                                     | 8830                                | 900                                   | 1.13                                                                                | 3 -            | 6120                    | - 35                                                                                | B-101        | B-117        | B-136        |       |       |       |       |
|                                           |                                |                                  | 9350                                | 954                                   | 1.31  |                                           |                                |                                                                                     | 8830                                | 900                                   | 1.45                                                                                | 3 -            | 6125                    | - 35                                                                                | B-101        | B-117        | B-136        |       |       |       |       |
|                                           |                                |                                  | 11000                               | 1120                                  | 1.62  |                                           |                                |                                                                                     | 10300                               | 1050                                  | 1.69                                                                                | 3 -            | 6130                    | - 35                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 11000                               | 1120                                  | 1.87  |                                           |                                |                                                                                     | 10300                               | 1050                                  | 1.93                                                                                | 3 -            | 6135                    | - 35                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 16000                               | 1630                                  | 2.37  |                                           |                                |                                                                                     | 15200                               | 1550                                  | 2.37                                                                                | 3 -            | 6140                    | - 35                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
| 33.7                                      | 592                            | 60.3                             | 16000                               | 1630                                  | 2.85  | 40.7                                      | 490                            | 50.0                                                                                | 15200                               | 1550                                  | 3.42                                                                                | 3 -            | 6145                    | - 35                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 9810                                | 1000                                  | 1.06  |                                           |                                |                                                                                     | 9380                                | 956                                   | 1.08                                                                                | 3 -            | 6125                    | - 43                                                                                | B-101        | B-117        | B-136        |       |       |       |       |
|                                           |                                |                                  | 11800                               | 1200                                  | 1.32  |                                           |                                |                                                                                     | 11100                               | 1130                                  | 1.36                                                                                | 3 -            | 6130                    | - 43                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 11800                               | 1200                                  | 1.52  |                                           |                                |                                                                                     | 11100                               | 1130                                  | 1.71                                                                                | 3 -            | 6135                    | - 43                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 16000                               | 1630                                  | 1.79  |                                           |                                |                                                                                     | 15900                               | 1620                                  | 1.79                                                                                | 3 -            | 6140                    | - 43                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 16000                               | 1630                                  | 2.12  |                                           |                                |                                                                                     | 15900                               | 1620                                  | 2.45                                                                                | 3 -            | 6145                    | - 43                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
| 28.4                                      | 702                            | 71.6                             | 20600                               | 2100                                  | 2.93  | 34.3                                      | 582                            | 59.3                                                                                | 19300                               | 1970                                  | 3.39                                                                                | 3 -            | 6160                    | - 43                                                                                | B-103        | B-119        | B-138        |       |       |       |       |
|                                           |                                |                                  | 9810                                | 1000                                  | 0.90  |                                           |                                |                                                                                     | 9760                                | 995                                   | 1.04                                                                                | 3 -            | 6125                    | - 51                                                                                | B-101        | B-117        | B-136        |       |       |       |       |
|                                           |                                |                                  | 12200                               | 1250                                  | 1.11  |                                           |                                |                                                                                     | 11500                               | 1180                                  | 1.15                                                                                | 3 -            | 6130                    | - 51                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 12200                               | 1250                                  | 1.16  |                                           |                                |                                                                                     | 11500                               | 1180                                  | 1.33                                                                                | 3 -            | 6135                    | - 51                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 16000                               | 1630                                  | 1.56  |                                           |                                |                                                                                     | 16000                               | 1630                                  | 1.56                                                                                | 3 -            | 6140                    | - 51                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 16000                               | 1630                                  | 1.68  |                                           |                                |                                                                                     | 16000                               | 1630                                  | 1.92                                                                                | 3 -            | 6145                    | - 51                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
| 24.6                                      | 812                            | 82.8                             | 21300                               | 2180                                  | 2.50  | 29.7                                      | 673                            | 68.6                                                                                | 20100                               | 2050                                  | 2.61                                                                                | 3 -            | 6160                    | - 51                                                                                | B-103        | B-119        | B-138        |       |       |       |       |
|                                           |                                |                                  | 21300                               | 2180                                  | 2.99  |                                           |                                |                                                                                     | 20100                               | 2050                                  | 3.42                                                                                | 3 -            | 6165                    | - 51                                                                                | B-103        | B-119        | B-138        |       |       |       |       |
|                                           |                                |                                  | 12800                               | 1300                                  | 1.11  |                                           |                                |                                                                                     | 12100                               | 1230                                  | 1.15                                                                                | 3 -            | 6135                    | - 59                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 16000                               | 1630                                  | 1.35  |                                           |                                |                                                                                     | 16000                               | 1630                                  | 1.35                                                                                | 3 -            | 6140                    | - 59                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 16000                               | 1630                                  | 1.45  |                                           |                                |                                                                                     | 16000                               | 1630                                  | 1.66                                                                                | 3 -            | 6145                    | - 59                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 22100                               | 2250                                  | 2.01  |                                           |                                |                                                                                     | 22100                               | 2250                                  | 2.01                                                                                | 3 -            | 6160                    | - 59                                                                                | B-103        | B-119        | B-138        |       |       |       |       |
| 20.4                                      | 977                            | 99.6                             | 22100                               | 2250                                  | 2.59  | 24.6                                      | 810                            | 82.5                                                                                | 22100                               | 2250                                  | 2.61                                                                                | 3 -            | 6165                    | - 59                                                                                | B-103        | B-119        | B-138        |       |       |       |       |
|                                           |                                |                                  | 13500                               | 1380                                  | 0.92  |                                           |                                |                                                                                     | 12800                               | 1300                                  | 0.98                                                                                | 3 -            | 6135                    | - 71                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 16000                               | 1630                                  | 1.10  |                                           |                                |                                                                                     | 16000                               | 1630                                  | 1.10                                                                                | 3 -            | 6140                    | - 71                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 16000                               | 1630                                  | 1.19  |                                           |                                |                                                                                     | 16000                               | 1630                                  | 1.38                                                                                | 3 -            | 6145                    | - 71                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 22100                               | 2250                                  | 1.58  |                                           |                                |                                                                                     | 22100                               | 2250                                  | 1.58                                                                                | 3 -            | 6160                    | - 71                                                                                | B-103        | B-119        | B-138        |       |       |       |       |
|                                           |                                |                                  | 22100                               | 2250                                  | 2.15  |                                           |                                |                                                                                     | 22100                               | 2250                                  | 2.57                                                                                | 3 -            | 6165                    | - 71                                                                                | B-103        | B-119        | B-138        |       |       |       |       |
| 16.7                                      | 1200                           | 122                              | 16000                               | 1630                                  | 0.98  | 20.1                                      | 992                            | 101                                                                                 | 16000                               | 1630                                  | 1.13                                                                                | 3 -            | 6145                    | - 87                                                                                | B-102        | B-118        | B-137        |       |       |       |       |
|                                           |                                |                                  | 22100                               | 2250                                  | 1.46  |                                           |                                |                                                                                     | 22100                               | 2250                                  | 1.58                                                                                | 3 -            | 6160                    | - 87                                                                                | B-103        | B-119        | B-138        |       |       |       |       |
|                                           |                                |                                  | 22100                               | 2250                                  | 1.71  |                                           |                                |                                                                                     | 22100                               | 2250                                  | 1.77                                                                                | 3 -            | 6165                    | - 87                                                                                | B-103        | B-119        | B-138        |       |       |       |       |
| 13.9                                      | 1360                           | 138                              | 780                                 | 79.5                                  | 14700 | 1500                                      | *                              | 16.8                                                                                | 1120                                | 115                                   | 14700                                                                               | 1500           | *                       | 3 -                                                                                 | 6130DC       | - 104        | B-109        | B-125 | B-144 |       |       |
|                                           |                                |                                  | 940                                 | 95.8                                  | 14700 | 1500                                      | *                              |                                                                                     |                                     |                                       | 940                                                                                 | 95.8           | 14700                   | 1500                                                                                | *            | 3 -          | 6135DC       | - 104 | B-109 | B-125 | B-144 |
|                                           |                                |                                  | 16000                               | 1630                                  | 1.01  | 16000                                     | 1630                           |                                                                                     |                                     |                                       | 1.22                                                                                | 3 -            | 6145DC                  | - 104                                                                               | B-109        | B-125        | B-144        |       |       |       |       |
|                                           |                                |                                  | 22100                               | 2250                                  | 1.29  | 22100                                     | 2250                           |                                                                                     |                                     |                                       | 1.45                                                                                | 3 -            | 6160DB                  | - 104                                                                               | B-110        | B-126        | B-145        |       |       |       |       |
|                                           |                                |                                  | 22100                               | 2250                                  | 1.29  | 22100                                     | 2250                           |                                                                                     |                                     |                                       | 1.56                                                                                | 3 -            | 6160DC                  | - 104                                                                               | B-111        | B-127        | B-146        |       |       |       |       |
|                                           |                                |                                  | 22100                               | 2250                                  | 1.45  | 22100                                     | 2250                           |                                                                                     |                                     |                                       | 1.45                                                                                | 3 -            | 6165DB                  | - 104                                                                               | B-110        | B-126        | B-145        |       |       |       |       |
|                                           |                                |                                  | 22100                               | 2250                                  | 1.55  | 22100                                     | 2250                           |                                                                                     |                                     |                                       | 1.87                                                                                | 3 -            | 6165DC                  | - 104                                                                               | B-111        | B-127        | B-146        |       |       |       |       |
|                                           |                                |                                  | 29500                               | 3010                                  | 1.86  | 29400                                     | 3000                           |                                                                                     |                                     |                                       | 2.25                                                                                | 3 -            | 6170DC                  | - 104                                                                               | B-111        | B-127        | B-146        |       |       |       |       |
|                                           |                                |                                  | 29500                               | 3010                                  | 2.32  | 29400                                     | 3000                           |                                                                                     |                                     |                                       | 2.80                                                                                | 3 -            | 6175DC                  | - 104                                                                               | B-111        | B-127        | B-146        |       |       |       |       |
|                                           |                                |                                  | 41300                               | 4210                                  | 2.99  | 38800                                     | 3960                           |                                                                                     |                                     |                                       | 3.61                                                                                | 3 -            | 6180DB                  | - 104                                                                               | B-111        | B-127        | B-146        |       |       |       |       |

## Selection Tables Gearmotors



|        |                |       |      |     |      |      |
|--------|----------------|-------|------|-----|------|------|
| 2.2 kW | Hz             |       | 50Hz |     | 60Hz |      |
|        | P              |       | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

| 50Hz                                      |                                        |                                           |       |      |      | 60Hz                                      |                                        |                                           |       | Nomenclature                       |      |                  | Page of Dimension Sheet |       |       |
|-------------------------------------------|----------------------------------------|-------------------------------------------|-------|------|------|-------------------------------------------|----------------------------------------|-------------------------------------------|-------|------------------------------------|------|------------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] |       | SF   |      | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] |       | Input Capacity - Symbol Frame Size |      | Reduction Ratio  | CNHM                    | CNFM  | CNVM  |
|                                           |                                        |                                           |       |      |      |                                           |                                        |                                           |       |                                    |      |                  | CHHM                    | CHFM  | CVVM  |
| 12.0                                      | 940                                    | 95.8                                      | 14700 | 1500 | *    | 14.5                                      | 940                                    | 95.8                                      | 14700 | 1500                               | *    | 3 - 6135DC - 121 | B-109                   | B-125 | B-144 |
|                                           | 1230                                   | 125                                       | 16000 | 1630 | *    |                                           | 1230                                   | 125                                       | 16000 | 1630                               | *    | 3 - 6140DC - 121 | B-109                   | B-125 | B-144 |
|                                           | 1290                                   | 132                                       | 16000 | 1630 | *    |                                           | 1290                                   | 132                                       | 16000 | 1630                               | *    | 3 - 6145DC - 121 | B-109                   | B-125 | B-144 |
|                                           |                                        |                                           | 15300 | 1560 | 0.82 |                                           |                                        |                                           | 16000 | 1630                               | 0.98 | 3 - 6145DC - 121 | B-109                   | B-125 | B-144 |
|                                           |                                        |                                           | 22100 | 2250 | 1.11 |                                           |                                        |                                           | 22100 | 2250                               | 1.34 | 3 - 6160DB - 121 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 22100 | 2250 | 1.11 |                                           |                                        |                                           | 22100 | 2250                               | 1.34 | 3 - 6160DC - 121 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 22100 | 2250 | 1.33 |                                           |                                        |                                           | 22100 | 2250                               | 1.45 | 3 - 6165DB - 121 | B-110                   | B-126 | B-145 |
|                                           | 1580                                   | 161                                       | 22100 | 2250 | 1.33 |                                           | 1310                                   | 133                                       | 22100 | 2250                               | 1.61 | 3 - 6165DC - 121 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 29500 | 3010 | 1.45 |                                           |                                        |                                           | 29500 | 3010                               | 1.45 | 3 - 6170DB - 121 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 29500 | 3010 | 1.60 |                                           |                                        |                                           | 29500 | 3010                               | 1.94 | 3 - 6170DC - 121 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 29500 | 3010 | 2.00 |                                           |                                        |                                           | 29500 | 3010                               | 2.41 | 3 - 6175DC - 121 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 41700 | 4250 | 2.57 |                                           |                                        |                                           | 41300 | 4210                               | 3.11 | 3 - 6180DB - 121 | B-111                   | B-127 | B-146 |
| 10.1                                      | 1230                                   | 125                                       | 16000 | 1630 | *    | 12.2                                      | 1230                                   | 125                                       | 16000 | 1630                               | *    | 3 - 6140DC - 143 | B-109                   | B-125 | B-144 |
|                                           | 1370                                   | 140                                       | 15900 | 1620 | *    |                                           | 1370                                   | 140                                       | 15900 | 1620                               | *    | 3 - 6145DC - 143 | B-109                   | B-125 | B-144 |
|                                           |                                        |                                           | 22100 | 2250 | 1.13 |                                           |                                        |                                           | 22100 | 2250                               | 1.36 | 3 - 6165DB - 143 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 29500 | 3010 | 1.35 |                                           |                                        |                                           | 29500 | 3010                               | 1.45 | 3 - 6170DB - 143 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 29500 | 3010 | 1.35 |                                           |                                        |                                           | 29500 | 3010                               | 1.64 | 3 - 6170DC - 143 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 29500 | 3010 | 1.45 |                                           |                                        |                                           | 29500 | 3010                               | 1.45 | 3 - 6175DB - 143 | B-110                   | B-126 | B-145 |
|                                           | 1860                                   | 190                                       | 29500 | 3010 | 1.69 |                                           | 1550                                   | 158                                       | 29500 | 3010                               | 2.04 | 3 - 6175DC - 143 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 41700 | 4250 | 2.18 |                                           |                                        |                                           | 41700 | 4250                               | 2.63 | 3 - 6180DB - 143 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 41700 | 4250 | 2.63 |                                           |                                        |                                           | 41700 | 4250                               | 3.17 | 3 - 6185DB - 143 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 59000 | 6010 | 2.69 |                                           |                                        |                                           | 59000 | 6010                               | 2.69 | 3 - 6190DA - 143 | B-111                   | B-128 | B-147 |
| 8.79                                      | 1230                                   | 125                                       | 16000 | 1630 | *    | 10.6                                      | 1230                                   | 125                                       | 16000 | 1630                               | *    | 3 - 6140DC - 165 | B-109                   | B-125 | B-144 |
|                                           | 1360                                   | 138                                       | 16000 | 1630 | *    |                                           | 1360                                   | 138                                       | 16000 | 1630                               | *    | 3 - 6145DC - 165 | B-109                   | B-125 | B-144 |
|                                           | 1760                                   | 179                                       | 22100 | 2250 | *    |                                           | 1760                                   | 179                                       | 22100 | 2250                               | *    | 3 - 6160DB - 165 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 22100 | 2250 | 0.98 |                                           |                                        |                                           | 22100 | 2250                               | 1.18 | 3 - 6165DB - 165 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 29500 | 3010 | 1.18 |                                           |                                        |                                           | 29500 | 3010                               | 1.42 | 3 - 6170DB - 165 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 29500 | 3010 | 1.45 |                                           |                                        |                                           | 29500 | 3010                               | 1.45 | 3 - 6175DB - 165 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 29500 | 3010 | 1.46 |                                           |                                        |                                           | 29500 | 3010                               | 1.77 | 3 - 6175DC - 165 | B-111                   | B-127 | B-146 |
|                                           | 2150                                   | 219                                       | 41700 | 4250 | 1.45 |                                           | 1780                                   | 182                                       | 41700 | 4250                               | 1.45 | 3 - 6180DA - 165 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 41700 | 4250 | 1.89 |                                           |                                        |                                           | 41700 | 4250                               | 2.28 | 3 - 6180DB - 165 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 41700 | 4250 | 2.29 |                                           |                                        |                                           | 41700 | 4250                               | 2.76 | 3 - 6185DB - 165 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 59000 | 6010 | 2.69 |                                           |                                        |                                           | 59000 | 6010                               | 2.69 | 3 - 6190DA - 165 | B-111                   | B-128 | B-147 |
|                                           |                                        |                                           | 59000 | 6010 | 2.97 |                                           |                                        |                                           | 59000 | 6010                               | 3.58 | 3 - 6190DB - 165 | B-112                   | B-128 | B-147 |
| 7.44                                      | 1760                                   | 179                                       | 22100 | 2250 | *    | 8.97                                      | 1760                                   | 179                                       | 22100 | 2250                               | *    | 3 - 6160DB - 195 | B-110                   | B-126 | B-145 |
|                                           | 2100                                   | 214                                       | 22100 | 2250 | *    |                                           | 2100                                   | 214                                       | 22100 | 2250                               | *    | 3 - 6165DB - 195 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 22100 | 2250 | 0.83 |                                           |                                        |                                           | 22100 | 2250                               | 1.00 | 3 - 6165DB - 195 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 29500 | 3010 | 0.98 |                                           |                                        |                                           | 29500 | 3010                               | 1.20 | 3 - 6170DB - 195 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 29500 | 3010 | 1.24 |                                           |                                        |                                           | 29500 | 3010                               | 1.45 | 3 - 6175DB - 195 | B-110                   | B-126 | B-145 |
|                                           |                                        |                                           | 41700 | 4250 | 1.45 |                                           |                                        |                                           | 41700 | 4250                               | 1.45 | 3 - 6180DA - 195 | B-110                   | B-126 | B-145 |
|                                           | 2540                                   | 259                                       | 41700 | 4250 | 1.60 |                                           | 2110                                   | 215                                       | 41700 | 4250                               | 1.93 | 3 - 6180DB - 195 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 41700 | 4250 | 1.94 |                                           |                                        |                                           | 41700 | 4250                               | 2.34 | 3 - 6185DB - 195 | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           | 59000 | 6010 | 2.51 |                                           |                                        |                                           | 59000 | 6010                               | 2.69 | 3 - 6190DA - 195 | B-111                   | B-128 | B-147 |
|                                           |                                        |                                           | 59000 | 6010 | 2.51 |                                           |                                        |                                           | 59000 | 6010                               | 3.03 | 3 - 6190DB - 195 | B-112                   | B-128 | B-147 |
|                                           |                                        |                                           | 59000 | 6010 | 2.56 |                                           |                                        |                                           | 59000 | 6010                               | 2.69 | 3 - 6195DA - 195 | B-111                   | B-128 | B-147 |
|                                           |                                        |                                           | 84100 | 8570 | 2.69 |                                           |                                        |                                           | 84100 | 8570                               | 2.69 | 3 - 6205DA - 195 | B-112                   | B-129 | B-148 |

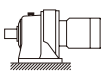
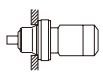
GEARMOTORS

Selection Tables  
2.2 kW

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.



## Selection Tables Gearmotors

| 2.2 kW                         |                                   | n <sub>1</sub> : Motor Speed |        |       |                                |                                   |                              |  |        |                |  |                  |       |  |                         |                  |       |
|--------------------------------|-----------------------------------|------------------------------|--------|-------|--------------------------------|-----------------------------------|------------------------------|-------------------------------------------------------------------------------------|--------|----------------|-------------------------------------------------------------------------------------|------------------|-------|-------------------------------------------------------------------------------------|-------------------------|------------------|-------|
|                                |                                   | Hz                           |        | 50Hz  |                                | 60Hz                              |                              |                                                                                     |        |                |                                                                                     |                  |       |                                                                                     |                         |                  |       |
|                                |                                   | P                            |        | 4     | 6                              | 4                                 | 6                            |                                                                                     |        |                |                                                                                     |                  |       |                                                                                     |                         |                  |       |
|                                |                                   | n <sub>1</sub>               | r/min  | 1450  | 980                            | 1750                              | 1165                         |                                                                                     |        |                |                                                                                     |                  |       |                                                                                     |                         |                  |       |
| 50Hz                           |                                   |                              |        |       |                                | 60Hz                              |                              |                                                                                     |        |                |                                                                                     | Nomenclature     |       |                                                                                     | Page of Dimension Sheet |                  |       |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |                                                                                     | SF     | Input Capacity | Symbol Frame Size                                                                   | Reduction Ratio  | CNHM  | CNFM                                                                                | CNVM                    |                  |       |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]                                                                                 | [kgf]  |                |                                                                                     |                  | CHHM  | CHFM                                                                                | CVVM                    |                  |       |
| 6.28                           | 1760                              | 179                          | 22100  | 2250  | *                              | 7.58                              | 1760                         | 179                                                                                 | 22100  | 2250           | *                                                                                   | 3 - 6160DB - 231 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                | 2100                              | 214                          | 22100  | 2250  | *                              |                                   | 2100                         | 214                                                                                 | 22100  | 2250           | *                                                                                   | 3 - 6165DB - 231 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                |                                   |                              | 29500  | 3010  | 1.05                           |                                   |                              |                                                                                     | 29500  | 3010           | 1.26                                                                                | 3 - 6175DB - 231 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                |                                   |                              | 41700  | 4250  | 1.34                           |                                   |                              |                                                                                     | 41700  | 4250           | 1.45                                                                                | 3 - 6180DA - 231 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                |                                   |                              | 41700  | 4250  | 1.34                           |                                   |                              |                                                                                     | 41700  | 4250           | 1.62                                                                                | 3 - 6180DB - 231 | B-111 | B-127                                                                               | B-146                   |                  |       |
|                                |                                   |                              | 41700  | 4250  | 1.45                           |                                   |                              |                                                                                     | 41700  | 4250           | 1.45                                                                                | 3 - 6185DA - 231 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                | 3010                              | 307                          | 41700  | 4250  | 1.66                           |                                   | 2500                         | 254                                                                                 | 41700  | 4250           | 2.00                                                                                | 3 - 6185DB - 231 | B-111 | B-127                                                                               | B-146                   |                  |       |
|                                |                                   |                              | 59000  | 6010  | 2.12                           |                                   |                              |                                                                                     | 59000  | 6010           | 2.56                                                                                | 3 - 6190DA - 231 | B-111 | B-128                                                                               | B-147                   |                  |       |
|                                |                                   |                              | 59000  | 6010  | 2.64                           |                                   |                              |                                                                                     | 59000  | 6010           | 2.69                                                                                | 3 - 6195DA - 231 | B-111 | B-128                                                                               | B-147                   |                  |       |
|                                |                                   |                              | 59000  | 6010  | 2.64                           |                                   |                              |                                                                                     | 59000  | 6010           | 3.19                                                                                | 3 - 6195DB - 231 | B-112 | B-128                                                                               | B-147                   |                  |       |
| 5.31                           | 2100                              | 214                          | 22100  | 2250  | *                              | 6.41                              | 2100                         | 214                                                                                 | 22100  | 2250           | *                                                                                   | 3 - 6165DB - 273 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                | 2530                              | 258                          | 29500  | 3010  | *                              |                                   | 2530                         | 258                                                                                 | 29500  | 3010           | *                                                                                   | 3 - 6170DB - 273 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                |                                   |                              | 29500  | 3010  | 0.88                           |                                   |                              |                                                                                     | 29500  | 3010           | 1.07                                                                                | 3 - 6175DB - 273 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                |                                   |                              | 41700  | 4250  | 1.14                           |                                   |                              |                                                                                     | 41700  | 4250           | 1.37                                                                                | 3 - 6180DA - 273 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                |                                   |                              | 41700  | 4250  | 1.40                           |                                   |                              |                                                                                     | 41700  | 4250           | 1.45                                                                                | 3 - 6185DA - 273 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                | 3560                              | 363                          | 41700  | 4250  | 1.40                           |                                   | 2950                         | 301                                                                                 | 41700  | 4250           | 1.70                                                                                | 3 - 6185DB - 273 | B-111 | B-127                                                                               | B-146                   |                  |       |
|                                |                                   |                              | 59000  | 6010  | 1.79                           |                                   |                              |                                                                                     | 59000  | 6010           | 2.16                                                                                | 3 - 6190DA - 273 | B-111 | B-128                                                                               | B-147                   |                  |       |
|                                |                                   |                              | 59000  | 6010  | 2.24                           |                                   |                              |                                                                                     | 59000  | 6010           | 2.69                                                                                | 3 - 6195DA - 273 | B-111 | B-128                                                                               | B-147                   |                  |       |
|                                |                                   |                              | 84100  | 8570  | 2.35                           |                                   |                              |                                                                                     | 84100  | 8570           | 2.66                                                                                | 3 - 6205DA - 273 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                | 4.55                              | 2530                         | 258    | 29500 | 3010                           |                                   | *                            | 5.49                                                                                | 2530   | 258            | 29500                                                                               | 3010             | *     | 3 - 6170DB - 319                                                                    | B-110                   | B-126            | B-145 |
| 3150                           |                                   | 321                          | 29500  | 3010  | *                              | 3150                              | 321                          |                                                                                     | 29500  | 3010           | *                                                                                   | 3 - 6175DB - 319 | B-110 | B-126                                                                               | B-145                   |                  |       |
|                                |                                   | 41700                        | 4250   | 1.20  |                                |                                   | 41700                        |                                                                                     | 4250   | 1.45           | 3 - 6185DA - 319                                                                    | B-110            | B-126 | B-145                                                                               |                         |                  |       |
|                                |                                   | 59000                        | 6010   | 1.53  |                                |                                   | 59000                        |                                                                                     | 6010   | 1.85           | 3 - 6190DA - 319                                                                    | B-111            | B-128 | B-147                                                                               |                         |                  |       |
| 4160                           |                                   | 424                          | 59000  | 6010  | 1.91                           | 3450                              | 351                          |                                                                                     | 59000  | 6010           | 2.31                                                                                | 3 - 6195DA - 319 | B-111 | B-128                                                                               | B-147                   |                  |       |
|                                |                                   |                              | 84100  | 8570  | 1.94                           |                                   |                              |                                                                                     | 84100  | 8570           | 2.20                                                                                | 3 - 6205DA - 319 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                |                                   |                              | 84100  | 8570  | 2.22                           |                                   |                              |                                                                                     | 84100  | 8570           | 2.68                                                                                | 3 - 6205DB - 319 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                |                                   |                              |        |       | 41700                          |                                   |                              |                                                                                     | 4250   | 1.20           |                                                                                     |                  | 41700 | 4250                                                                                | 1.45                    | 3 - 6185DA - 319 | B-110 |
| 3.85                           |                                   | 3150                         | 321    | 29500 | 3010                           | *                                 | 4.64                         |                                                                                     | 3150   | 321            | 29500                                                                               | 3010             | *     | 3 - 6175DB - 377                                                                    | B-110                   | B-126            | B-145 |
|                                |                                   | 4050                         | 413    | 41700 | 4250                           | *                                 |                              |                                                                                     | 4050   | 413            | 41700                                                                               | 4250             | *     | 3 - 6180DA - 377                                                                    | B-110                   | B-126            | B-145 |
|                                |                                   |                              | 41700  | 4250  | 1.02                           |                                   |                              | 41700                                                                               | 4250   | 1.23           | 3 - 6185DA - 377                                                                    | B-110            | B-126 | B-145                                                                               |                         |                  |       |
|                                |                                   |                              | 59000  | 6010  | 1.30                           |                                   |                              | 59000                                                                               | 6010   | 1.57           | 3 - 6190DA - 377                                                                    | B-111            | B-128 | B-147                                                                               |                         |                  |       |
|                                | 4920                              | 501                          | 59000  | 6010  | 1.62                           | 4070                              |                              | 415                                                                                 | 59000  | 6010           | 1.95                                                                                | 3 - 6195DA - 377 | B-111 | B-128                                                                               | B-147                   |                  |       |
|                                |                                   |                              | 84100  | 8570  | 1.74                           |                                   |                              |                                                                                     | 84100  | 8570           | 1.97                                                                                | 3 - 6205DA - 377 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                |                                   |                              | 84100  | 8570  | 1.88                           |                                   |                              |                                                                                     | 84100  | 8570           | 2.27                                                                                | 3 - 6205DB - 377 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                |                                   |                              | 104000 | 10600 | 2.57                           |                                   |                              |                                                                                     | 104000 | 10600          | 3.11                                                                                | 3 - 6215DA - 377 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                | 3.07                              | 4060                         | 414    | 41700 | 4250                           | *                                 |                              | 3.70                                                                                | 4060   | 414            | 41700                                                                               | 4250             | *     | 3 - 6180DA - 473                                                                    | B-110                   | B-126            | B-145 |
|                                |                                   | 5000                         | 510    | 41700 | 4250                           | *                                 |                              |                                                                                     | 5000   | 510            | 41700                                                                               | 4250             | *     | 3 - 6185DA - 473                                                                    | B-110                   | B-126            | B-145 |
|                                |                                   | 41700                        | 4250   | 0.81  |                                |                                   | 41700                        |                                                                                     | 4250   | 0.98           | 3 - 6185DA - 473                                                                    | B-110            | B-126 | B-145                                                                               |                         |                  |       |
|                                |                                   | 59000                        | 6010   | 1.03  |                                |                                   | 59000                        |                                                                                     | 6010   | 1.25           | 3 - 6190DA - 473                                                                    | B-111            | B-128 | B-147                                                                               |                         |                  |       |
|                                |                                   | 59000                        | 6010   | 1.29  |                                |                                   | 59000                        |                                                                                     | 6010   | 1.56           | 3 - 6195DA - 473                                                                    | B-111            | B-128 | B-147                                                                               |                         |                  |       |
| 6170                           |                                   | 629                          | 84100  | 8570  | 1.34                           | 5110                              | 521                          |                                                                                     | 84100  | 8570           | 1.52                                                                                | 3 - 6205DA - 473 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                |                                   |                              | 84100  | 8570  | 1.51                           |                                   |                              |                                                                                     | 84100  | 8570           | 1.82                                                                                | 3 - 6205DB - 473 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                |                                   |                              | 104000 | 10600 | 2.05                           |                                   |                              |                                                                                     | 104000 | 10600          | 2.48                                                                                | 3 - 6215DA - 473 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                |                                   |                              | 145000 | 14800 | 2.59                           |                                   |                              |                                                                                     | 145000 | 14800          | 3.13                                                                                | 3 - 6225DA - 473 | B-113 | B-130                                                                               | B-149                   |                  |       |
| 2.59                           |                                   | 5000                         | 510    | 41700 | 4250                           | *                                 | 3.13                         |                                                                                     | 5000   | 510            | 41700                                                                               | 4250             | *     | 3 - 6185DA - 559                                                                    | B-110                   | B-126            | B-145 |
|                                |                                   |                              | 59000  | 6010  | 1.09                           |                                   |                              | 59000                                                                               | 6010   | 1.32           | 3 - 6195DA - 559                                                                    | B-111            | B-128 | B-147                                                                               |                         |                  |       |
|                                |                                   |                              | 84100  | 8570  | 1.20                           |                                   |                              | 84100                                                                               | 8570   | 1.36           | 3 - 6205DA - 559                                                                    | B-112            | B-129 | B-148                                                                               |                         |                  |       |
|                                | 7290                              | 743                          | 84100  | 8570  | 1.28                           | 6040                              |                              | 616                                                                                 | 84100  | 8570           | 1.54                                                                                | 3 - 6205DB - 559 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                |                                   |                              | 104000 | 10600 | 1.74                           |                                   |                              |                                                                                     | 104000 | 10600          | 2.09                                                                                | 3 - 6215DA - 559 | B-112 | B-129                                                                               | B-148                   |                  |       |
|                                |                                   |                              | 145000 | 14800 | 2.19                           |                                   |                              |                                                                                     | 145000 | 14800          | 2.65                                                                                | 3 - 6225DA - 559 | B-113 | B-130                                                                               | B-149                   |                  |       |
|                                |                                   |                              | 179000 | 18200 | 2.81                           |                                   |                              |                                                                                     | 179000 | 18200          | 3.39                                                                                | 3 - 6235DA - 559 | B-114 | B-131                                                                               | B-150                   |                  |       |



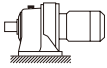
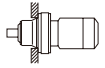






## Selection Tables Gearmotors

| 3.0 kW |  | n <sub>1</sub> : Motor Speed |       |      |     |      |      |  |  |  |
|--------|--|------------------------------|-------|------|-----|------|------|--|--|--|
|        |  | Hz                           |       | 50Hz |     | 60Hz |      |  |  |  |
|        |  | P                            |       | 4    | 6   | 4    | 6    |  |  |  |
|        |  | n <sub>1</sub>               | r/min | 1450 | 980 | 1750 | 1165 |  |  |  |


CHHM/CNHM
CHFM/CNFM
CVVM/CNVM

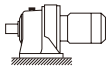
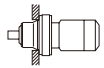
| 50Hz                           |                                   |                              |              |             | 60Hz                           |                                   |                              |              |             | Nomenclature   |                   |                 | Page of Dimension Sheet |              |              |
|--------------------------------|-----------------------------------|------------------------------|--------------|-------------|--------------------------------|-----------------------------------|------------------------------|--------------|-------------|----------------|-------------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |              | SF          | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |              | SF          | Input Capacity | Symbol Frame Size | Reduction Ratio | CNHM                    | CNFM         | CNVM         |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]          | [kgf]       | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]          | [kgf]       |                |                   |                 | CHHM                    | CHFM         | CVVM         |
| 24.6                           | 1110                              | 113                          | 12600        | 1280        | 29.7                           | 918                               | 93.5                         | 11900        | 1210        | 4 -            | 6135              | - 59            | B-102                   | B-118        | B-137        |
|                                |                                   |                              | 16000        | 1630        |                                |                                   |                              | 16000        | 1630        | 4 -            | 6140              | - 59            | B-102                   | B-118        | B-137        |
|                                |                                   |                              | <b>16000</b> | <b>1630</b> |                                |                                   |                              | <b>16000</b> | <b>1630</b> | <b>4 -</b>     | <b>6145</b>       | <b>- 59</b>     | <b>B-102</b>            | <b>B-118</b> | <b>B-137</b> |
|                                |                                   |                              | 22100        | 2250        |                                |                                   |                              | 22100        | 2250        | 4 -            | 6160              | - 59            | B-103                   | B-119        | B-138        |
|                                |                                   |                              | 22100        | 2250        |                                |                                   |                              | 22100        | 2250        | 4 -            | 6165              | - 59            | B-103                   | B-119        | B-138        |
|                                |                                   |                              | 25200        | 2570        |                                |                                   |                              | 23800        | 2420        | 4 -            | 6170              | - 59            | B-103                   | B-119        | B-138        |
| 20.4                           | 1330                              | 136                          | 25200        | 2570        | 24.6                           | 1100                              | 113                          | 23800        | 2420        | 4 -            | 6175              | - 59            | B-103                   | B-119        | B-138        |
|                                |                                   |                              | 16000        | 1630        |                                |                                   |                              | 16000        | 1630        | 4 -            | 6145              | - 71            | B-102                   | B-118        | B-137        |
|                                |                                   |                              | <b>22100</b> | <b>2250</b> |                                |                                   |                              | <b>22100</b> | <b>2250</b> | <b>4 -</b>     | <b>6160</b>       | <b>- 71</b>     | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
|                                |                                   |                              | 22100        | 2250        |                                |                                   |                              | 22100        | 2250        | 4 -            | 6165              | - 71            | B-103                   | B-119        | B-138        |
|                                |                                   |                              | 26700        | 2720        |                                |                                   |                              | 25100        | 2560        | 4 -            | 6170              | - 71            | B-103                   | B-119        | B-138        |
|                                |                                   |                              | 26700        | 2720        |                                |                                   |                              | 25100        | 2560        | 4 -            | 6175              | - 71            | B-103                   | B-119        | B-138        |
| 16.7                           | 1630                              | 166                          | 35900        | 3650        | 20.1                           | 1350                              | 138                          | 33700        | 3440        | 4 -            | 6180              | - 71            | B-104                   | B-120        | B-139        |
|                                |                                   |                              | <b>22100</b> | <b>2250</b> |                                |                                   |                              | <b>21900</b> | <b>2230</b> | <b>4 -</b>     | <b>6160</b>       | <b>- 87</b>     | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
|                                |                                   |                              | 22100        | 2250        |                                |                                   |                              | 21900        | 2230        | 4 -            | 6165              | - 87            | B-103                   | B-119        | B-138        |
|                                |                                   |                              | 28600        | 2910        |                                |                                   |                              | 26900        | 2750        | 4 -            | 6170              | - 87            | B-103                   | B-119        | B-138        |
|                                |                                   |                              | 28600        | 2910        |                                |                                   |                              | 26900        | 2750        | 4 -            | 6175              | - 87            | B-103                   | B-119        | B-138        |
|                                |                                   |                              | 38600        | 3930        |                                |                                   |                              | 36300        | 3700        | 4 -            | 6180              | - 87            | B-104                   | B-120        | B-139        |
| 13.9                           | 1850                              | 189                          | 38600        | 3930        | 16.8                           | 1530                              | 156                          | 36300        | 3700        | 4 -            | 6185              | - 87            | B-104                   | B-120        | B-139        |
|                                |                                   |                              | 22100        | 2250        |                                |                                   |                              | 22100        | 2250        | 4 -            | 6165DC            | - 104           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 29500        | 3010        |                                |                                   |                              | 29200        | 2970        | 4 -            | 6170DC            | - 104           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 29500        | 3010        |                                |                                   |                              | 29200        | 2970        | 4 -            | 6175DC            | - 104           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 41100        | 4190        |                                |                                   |                              | 38700        | 3940        | 4 -            | 6180DB            | - 104           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 41100        | 4190        |                                |                                   |                              | 38700        | 3940        | 4 -            | 6185DB            | - 104           | B-111                   | B-127        | B-146        |
| 12.0                           | 2150                              | 219                          | 57400        | 5850        | 14.5                           | 1780                              | 182                          | 53900        | 5500        | 4 -            | 6190DA            | - 104           | B-111                   | B-128        | B-147        |
|                                |                                   |                              | 57400        | 5850        |                                |                                   |                              | 53900        | 5500        | 4 -            | 6195DA            | - 104           | B-111                   | B-128        | B-147        |
|                                |                                   |                              | 22100        | 2250        |                                |                                   |                              | 22100        | 2250        | 4 -            | 6160DC            | - 121           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 22100        | 2250        |                                |                                   |                              | 22100        | 2250        | 4 -            | 6165DC            | - 121           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 29500        | 3010        |                                |                                   |                              | 29500        | 3010        | 4 -            | 6170DC            | - 121           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 29500        | 3010        |                                |                                   |                              | 29500        | 3010        | 4 -            | 6175DC            | - 121           | B-111                   | B-127        | B-146        |
| 10.1                           | 2540                              | 259                          | 41700        | 4250        | 12.2                           | 2110                              | 215                          | 41200        | 4200        | 4 -            | 6180DB            | - 121           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 41700        | 4250        |                                |                                   |                              | 41200        | 4200        | 4 -            | 6185DB            | - 121           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 59000        | 6010        |                                |                                   |                              | 57500        | 5860        | 4 -            | 6190DB            | - 121           | B-112                   | B-128        | B-147        |
|                                |                                   |                              | 22100        | 2250        |                                |                                   |                              | 22100        | 2250        | 4 -            | 6160DC            | - 143           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 22100        | 2250        |                                |                                   |                              | 22100        | 2250        | 4 -            | 6165DC            | - 143           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 29500        | 3010        |                                |                                   |                              | 29500        | 3010        | 4 -            | 6170DC            | - 143           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 29500        | 3010        |                                |                                   |                              | 29500        | 3010        | 4 -            | 6175DC            | - 143           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 41700        | 4250        |                                |                                   |                              | 41700        | 4250        | 4 -            | 6180DB            | - 143           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 41700        | 4250        |                                |                                   |                              | 41700        | 4250        | 4 -            | 6185DB            | - 143           | B-111                   | B-127        | B-146        |
|                                |                                   |                              | 59000        | 6010        |                                |                                   |                              | 59000        | 6010        | 4 -            | 6190DA            | - 143           | B-111                   | B-128        | B-147        |
|                                |                                   |                              | 59000        | 6010        |                                |                                   |                              | 59000        | 6010        | 4 -            | 6190DB            | - 143           | B-112                   | B-128        | B-147        |
|                                |                                   |                              | 59000        | 6010        |                                |                                   |                              | 59000        | 6010        | 4 -            | 6195DB            | - 143           | B-112                   | B-128        | B-147        |

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.





## Selection Tables Gearmotors

| 3.0 kW                         |                                   | n <sub>1</sub> : Motor Speed |               |              |             |                                |                                   |  |               |              |  |                |                     |  |                         |              |              |
|--------------------------------|-----------------------------------|------------------------------|---------------|--------------|-------------|--------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|---------------|--------------|-------------------------------------------------------------------------------------|----------------|---------------------|-------------------------------------------------------------------------------------|-------------------------|--------------|--------------|
|                                |                                   | Hz                           |               | 50Hz         |             | 60Hz                           |                                   |                                                                                     |               |              |                                                                                     |                |                     |                                                                                     |                         |              |              |
|                                |                                   | P                            |               | 4            | 6           | 4                              | 6                                 |                                                                                     |               |              |                                                                                     |                |                     |                                                                                     |                         |              |              |
|                                |                                   | n <sub>1</sub>               | r/min         | 1450         | 980         | 1750                           | 1165                              |                                                                                     |               |              |                                                                                     |                |                     |                                                                                     |                         |              |              |
| 50Hz                           |                                   |                              |               |              |             | 60Hz                           |                                   |                                                                                     |               |              |                                                                                     | Nomenclature   |                     |                                                                                     | Page of Dimension Sheet |              |              |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |               | SF           |             | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro                                                        |               | SF           |                                                                                     | Input Capacity | Symbol Frame Size   | Reduction Ratio                                                                     | CNHM                    | CNFM         | CNVM         |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]           | [kgf]        |             | [r/min]                        | [N·m]                             | [kgf·m]                                                                             | [N]           | [kgf]        |                                                                                     |                |                     |                                                                                     | CHHM                    | CHFM         | CVVM         |
| 2.59                           | 6380                              | 650                          | 59000         | 6010         | *           | 3.13                           | 6380                              | 650                                                                                 | 59000         | 6010         | *                                                                                   | 4 -            | 6190DA              | - 559                                                                               | B-111                   | B-128        | B-147        |
|                                | 7960                              | 811                          | 59000         | 6010         | *           |                                | 7960                              | 811                                                                                 | 59000         | 6010         | *                                                                                   | 4 -            | 6195DA              | - 559                                                                               | B-111                   | B-128        | B-147        |
|                                | 8760                              | 893                          | 84100         | 8570         | *           |                                | 8230                              | 839                                                                                 | 84100         | 8570         | *                                                                                   | 4 -            | 6205DA              | - 559                                                                               | B-112                   | B-129        | B-148        |
|                                |                                   |                              | 58400         | 5950         | 0.80        |                                |                                   |                                                                                     | 58900         | 6000         | 0.97                                                                                | 4 -            | 6195DA              | - 559                                                                               | B-111                   | B-128        | B-147        |
|                                |                                   |                              | 84100         | 8570         | 0.88        |                                |                                   |                                                                                     | 84100         | 8570         | 1.00                                                                                | 4 -            | 6205DA              | - 559                                                                               | B-112                   | B-129        | B-148        |
|                                |                                   |                              | 84100         | 8570         | 0.94        |                                |                                   |                                                                                     | 84100         | 8570         | 1.13                                                                                | 4 -            | 6205DB              | - 559                                                                               | B-112                   | B-129        | B-148        |
|                                | 9940                              | 1010                         | 104000        | 10600        | 1.27        |                                | 8240                              | 840                                                                                 | 104000        | 10600        | 1.54                                                                                | 4 -            | 6215DA              | - 559                                                                               | B-112                   | B-129        | B-148        |
|                                |                                   |                              | 145000        | 14800        | 1.61        |                                |                                   |                                                                                     | 145000        | 14800        | 1.94                                                                                | 4 -            | 6225DA              | - 559                                                                               | B-113                   | B-130        | B-149        |
|                                |                                   |                              | 179000        | 18200        | 2.06        |                                |                                   |                                                                                     | 179000        | 18200        | 2.49                                                                                | 4 -            | 6235DA              | - 559                                                                               | B-114                   | B-131        | B-150        |
|                                |                                   |                              | 208000        | 21200        | 2.60        |                                |                                   |                                                                                     | 208000        | 21200        | 3.13                                                                                | 4 -            | 6245DA              | - 559                                                                               | B-114                   | B-131        | B-150        |
| 2.23                           | 7960                              | 811                          | 58100         | 5930         | *           | 2.70                           | 7960                              | 811                                                                                 | 58100         | 5930         | *                                                                                   | 4 -            | 6195DA              | - 649                                                                               | B-111                   | B-128        | B-147        |
|                                | 8300                              | 846                          | 84100         | 8570         | *           |                                | 7790                              | 794                                                                                 | 84100         | 8570         | *                                                                                   | 4 -            | 6205DA              | - 649                                                                               | B-112                   | B-129        | B-148        |
|                                |                                   |                              | 84100         | 8570         | 0.81        |                                |                                   |                                                                                     | 84100         | 8570         | 0.97                                                                                | 4 -            | 6205DB              | - 649                                                                               | B-112                   | B-129        | B-148        |
|                                |                                   |                              | 104000        | 10600        | 1.10        |                                |                                   |                                                                                     | 104000        | 10600        | 1.32                                                                                | 4 -            | 6215DA              | - 649                                                                               | B-112                   | B-129        | B-148        |
|                                | 11500                             | 1180                         | 145000        | 14800        | 1.38        |                                | 9560                              | 975                                                                                 | 145000        | 14800        | 1.66                                                                                | 4 -            | 6225DA              | - 649                                                                               | B-113                   | B-130        | B-149        |
|                                |                                   |                              | 179000        | 18200        | 1.78        |                                |                                   |                                                                                     | 179000        | 18200        | 2.14                                                                                | 4 -            | 6235DA              | - 649                                                                               | B-114                   | B-131        | B-150        |
|                                |                                   | 208000                       | 21200         | 2.24         |             |                                | 208000                            | 21200                                                                               | 2.70          | 4 -          | 6245DA                                                                              | - 649          | B-114               | B-131                                                                               | B-150                   |              |              |
| 1.98                           | 7960                              | 811                          | 59000         | 6010         | *           | 2.39                           | 7960                              | 811                                                                                 | 59000         | 6010         | *                                                                                   | 4 -            | 6195DA              | - 731                                                                               | B-111                   | B-128        | B-147        |
|                                | 9300                              | 948                          | 84100         | 8570         | *           |                                | 9060                              | 923                                                                                 | 84100         | 8570         | *                                                                                   | 4 -            | 6205DA              | - 731                                                                               | B-112                   | B-129        | B-148        |
|                                |                                   |                              | 104000        | 10600        | 0.97        |                                |                                   |                                                                                     | 104000        | 10600        | 1.17                                                                                | 4 -            | 6215DA              | - 731                                                                               | B-112                   | B-129        | B-148        |
|                                |                                   |                              | 145000        | 14800        | 1.23        |                                |                                   |                                                                                     | 145000        | 14800        | 1.49                                                                                | 4 -            | 6225DA              | - 731                                                                               | B-113                   | B-130        | B-149        |
|                                | 13000                             | 1330                         | 179000        | 18200        | 1.58        |                                | 10800                             | 1100                                                                                | 179000        | 18200        | 1.90                                                                                | 4 -            | 6235DA              | - 731                                                                               | B-114                   | B-131        | B-150        |
|                                |                                   |                              | 208000        | 21200        | 1.98        |                                |                                   |                                                                                     | 208000        | 21200        | 2.40                                                                                | 4 -            | 6245DA              | - 731                                                                               | B-114                   | B-131        | B-150        |
| 1.72                           | 9230                              | 941                          | 84100         | 8570         | *           | 2.08                           | 9230                              | 941                                                                                 | 84100         | 8570         | *                                                                                   | 4 -            | 6205DA              | - 841                                                                               | B-112                   | B-129        | B-148        |
|                                |                                   |                              | 104000        | 10600        | 0.85        |                                |                                   |                                                                                     | 104000        | 10600        | 1.02                                                                                | 4 -            | 6215DA              | - 841                                                                               | B-112                   | B-129        | B-148        |
|                                | 15000                             | 1520                         | <b>145000</b> | <b>14800</b> | <b>1.01</b> |                                | 12400                             | 1260                                                                                | <b>145000</b> | <b>14800</b> | <b>1.21</b>                                                                         | <b>4 -</b>     | <b>6225DA - 841</b> |                                                                                     | <b>B-113</b>            | <b>B-130</b> | <b>B-149</b> |
|                                |                                   |                              | 179000        | 18200        | 1.26        |                                |                                   |                                                                                     | 179000        | 18200        | 1.53                                                                                | 4 -            | 6235DA              | - 841                                                                               | B-114                   | B-131        | B-150        |
|                                |                                   | 208000                       | 21200         | 1.73         |             |                                | 208000                            | 21200                                                                               | 2.08          | 4 -          | 6245DA                                                                              | - 841          | B-114               | B-131                                                                               | B-150                   |              |              |
| 1.45                           | 12700                             | 1290                         | 104000        | 10600        | *           | 1.74                           | 12700                             | 1290                                                                                | 104000        | 10600        | *                                                                                   | 4 -            | 6215DA              | - 1003                                                                              | B-112                   | B-129        | B-148        |
|                                |                                   |                              | 145000        | 14800        | 0.89        |                                |                                   |                                                                                     | 145000        | 14800        | 1.07                                                                                | 4 -            | 6225DA              | - 1003                                                                              | B-113                   | B-130        | B-149        |
|                                | 17800                             | 1820                         | 179000        | 18200        | 1.15        |                                | 14800                             | 1510                                                                                | 179000        | 18200        | 1.39                                                                                | 4 -            | 6235DA              | - 1003                                                                              | B-114                   | B-131        | B-150        |
|                                |                                   |                              | 208000        | 21200        | 1.45        |                                |                                   |                                                                                     | 208000        | 21200        | 1.75                                                                                | 4 -            | 6245DA              | - 1003                                                                              | B-114                   | B-131        | B-150        |
| 1.16                           | 16000                             | 1630                         | 145000        | 14800        | *           | 1.40                           | 16000                             | 1630                                                                                | 145000        | 14800        | *                                                                                   | 4 -            | 6225DA              | - 1247                                                                              | B-113                   | B-130        | B-149        |
|                                | 22200                             | 2260                         | 179000        | 18200        | 0.92        |                                | 18400                             | 1870                                                                                | 179000        | 18200        | 1.12                                                                                | 4 -            | 6235DA              | - 1247                                                                              | B-114                   | B-131        | B-150        |
|                                |                                   |                              | 208000        | 21200        | 1.16        |                                |                                   |                                                                                     | 208000        | 21200        | 1.40                                                                                | 4 -            | 6245DA              | - 1247                                                                              | B-114                   | B-131        | B-150        |
| 0.980                          | 17200                             | 1750                         | 179000        | 18200        | *           | 1.18                           | 17200                             | 1750                                                                                | 179000        | 18200        | *                                                                                   | 4 -            | 6235DA              | - 1479                                                                              | B-114                   | B-131        | B-150        |
|                                | 26300                             | 2680                         | 208000        | 21200        | 0.86        |                                | 21800                             | 2220                                                                                | 208000        | 21200        | 1.04                                                                                | 4 -            | 6245DA              | - 1479                                                                              | B-114                   | B-131        | B-150        |
| 0.784                          | 20500                             | 2090                         | 179000        | 18200        | *           | 0.946                          | 20500                             | 2090                                                                                | 179000        | 18200        | *                                                                                   | 4 -            | 6235DA              | - 1849                                                                              | B-114                   | B-131        | B-150        |
|                                | 25800                             | 2630                         | 208000        | 21200        | *           |                                | 25800                             | 2630                                                                                | 208000        | 21200        | *                                                                                   | 4 -            | 6245DA              | - 1849                                                                              | B-114                   | B-131        | B-150        |
| 0.702                          | 25800                             | 2630                         | 208000        | 21200        | *           | 0.847                          | 25800                             | 2630                                                                                | 208000        | 21200        | *                                                                                   | 4 -            | 6245DA              | - 2065                                                                              | B-114                   | B-131        | B-150        |

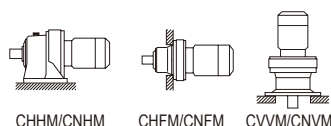
- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.







## Selection Tables Gearmotors



|        |                |       |      |     |      |      |
|--------|----------------|-------|------|-----|------|------|
| 3.7 kW | Hz             |       | 50Hz |     | 60Hz |      |
|        | P              |       | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

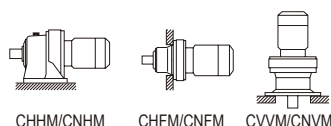
n: Motor Speed

| 50Hz                                      |                                |                                  |                              |             |             | 60Hz                                      |                                |                                  |                              |             |             | Nomenclature            |              |                 | Page of Dimension Sheet |              |              |
|-------------------------------------------|--------------------------------|----------------------------------|------------------------------|-------------|-------------|-------------------------------------------|--------------------------------|----------------------------------|------------------------------|-------------|-------------|-------------------------|--------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] | Output Torque<br>Tout<br>[kgf·m] | Allowable Radial Load<br>Pro |             | SF          | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] | Output Torque<br>Tout<br>[kgf·m] | Allowable Radial Load<br>Pro |             | SF          | Input Capacity - Symbol | Frame Size   | Reduction Ratio | CNHM                    | CNFM         | CNVM         |
|                                           |                                |                                  | [N]                          | [kgf]       |             |                                           |                                |                                  | [N]                          | [kgf]       |             |                         |              |                 | CHHM                    | CHFM         | CVVM         |
| 12.0                                      | 2100                           | 214                              | 22100                        | 2250        | *           | 14.5                                      | 2100                           | 214                              | 22100                        | 2250        | *           | 5 - 6165DC              | - 121        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 29500                        | 3010        | 1.19        |                                           |                                |                                  | 29500                        | 3010        | 1.43        | 5 - 6175DC              | - 121        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 41700                        | 4250        | 1.53        |                                           |                                |                                  | 41000                        | 4180        | 1.85        | 5 - 6180DB              | - 121        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 41700                        | 4250        | 1.81        |                                           |                                |                                  | 41000                        | 4180        | 2.19        | 5 - 6185DB              | - 121        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 59000                        | 6010        | 2.40        |                                           |                                |                                  | 57300                        | 5840        | 2.90        | 5 - 6190DB              | - 121        |                 | B-112                   | B-128        | B-147        |
|                                           |                                |                                  | 59000                        | 6010        | 2.86        |                                           |                                |                                  | 57300                        | 5840        | 3.05        | 5 - 6195DB              | - 121        |                 | B-112                   | B-128        | B-147        |
| 10.1                                      | 2530                           | 258                              | 29500                        | 3010        | *           | 12.2                                      | 2530                           | 258                              | 29500                        | 3010        | *           | 5 - 6170DC              | - 143        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | <b>29500</b>                 | <b>3010</b> | <b>1.00</b> |                                           |                                |                                  | <b>29500</b>                 | <b>3010</b> | <b>1.21</b> | <b>5 - 6175DC</b>       | <b>- 143</b> |                 | <b>B-111</b>            | <b>B-127</b> | <b>B-146</b> |
|                                           |                                |                                  | 41700                        | 4250        | 1.29        |                                           |                                |                                  | 41700                        | 4250        | 1.56        | 5 - 6180DB              | - 143        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 41700                        | 4250        | 1.56        |                                           |                                |                                  | 41700                        | 4250        | 1.89        | 5 - 6185DB              | - 143        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 59000                        | 6010        | 1.60        |                                           |                                |                                  | 59000                        | 6010        | 1.60        | 5 - 6190DA              | - 143        |                 | B-111                   | B-128        | B-147        |
|                                           |                                |                                  | 59000                        | 6010        | 2.03        |                                           |                                |                                  | 59000                        | 6010        | 2.46        | 5 - 6190DB              | - 143        |                 | B-112                   | B-128        | B-147        |
| 8.79                                      | 2530                           | 258                              | 29500                        | 3010        | *           | 10.6                                      | 2530                           | 258                              | 29500                        | 3010        | *           | 5 - 6170DC              | - 165        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 29500                        | 3010        | 0.87        |                                           |                                |                                  | 29500                        | 3010        | 1.05        | 5 - 6175DC              | - 165        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 41700                        | 4250        | 1.12        |                                           |                                |                                  | 41700                        | 4250        | 1.35        | 5 - 6180DB              | - 165        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 41700                        | 4250        | 1.36        |                                           |                                |                                  | 41700                        | 4250        | 1.64        | 5 - 6185DB              | - 165        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 59000                        | 6010        | 1.60        |                                           |                                |                                  | 59000                        | 6010        | 1.60        | 5 - 6190DA              | - 165        |                 | B-111                   | B-128        | B-147        |
|                                           |                                |                                  | 59000                        | 6010        | 1.76        |                                           |                                |                                  | 59000                        | 6010        | 2.13        | 5 - 6190DB              | - 165        |                 | B-112                   | B-128        | B-147        |
| 7.44                                      | 3150                           | 321                              | 29500                        | 3010        | *           | 8.97                                      | 3150                           | 321                              | 29500                        | 3010        | *           | 5 - 6175DC              | - 195        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 41700                        | 4250        | 1.15        |                                           |                                |                                  | 41700                        | 4250        | 1.39        | 5 - 6185DB              | - 195        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 59000                        | 6010        | 1.49        |                                           |                                |                                  | 59000                        | 6010        | 1.60        | 5 - 6190DA              | - 195        |                 | B-111                   | B-128        | B-147        |
|                                           |                                |                                  | 59000                        | 6010        | 1.49        |                                           |                                |                                  | 59000                        | 6010        | 1.80        | 5 - 6190DB              | - 195        |                 | B-112                   | B-128        | B-147        |
|                                           |                                |                                  | 59000                        | 6010        | 1.52        |                                           |                                |                                  | 59000                        | 6010        | 1.60        | 5 - 6195DA              | - 195        |                 | B-111                   | B-128        | B-147        |
|                                           |                                |                                  | 59000                        | 6010        | 1.85        |                                           |                                |                                  | 59000                        | 6010        | 2.23        | 5 - 6195DB              | - 195        |                 | B-112                   | B-128        | B-147        |
| 6.28                                      | 4050                           | 413                              | 41700                        | 4250        | *           | 7.58                                      | 4050                           | 413                              | 41700                        | 4250        | *           | 5 - 6180DB              | - 231        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 41700                        | 4250        | 0.98        |                                           |                                |                                  | 41700                        | 4250        | 1.19        | 5 - 6185DB              | - 231        |                 | B-111                   | B-127        | B-146        |
|                                           |                                |                                  | 59000                        | 6010        | 1.26        |                                           |                                |                                  | 59000                        | 6010        | 1.52        | 5 - 6190DA              | - 231        |                 | B-111                   | B-128        | B-147        |
|                                           |                                |                                  | 59000                        | 6010        | 1.57        |                                           |                                |                                  | 59000                        | 6010        | 1.60        | 5 - 6195DA              | - 231        |                 | B-111                   | B-128        | B-147        |
|                                           |                                |                                  | 59000                        | 6010        | 1.57        |                                           |                                |                                  | 59000                        | 6010        | 1.90        | 5 - 6195DB              | - 231        |                 | B-112                   | B-128        | B-147        |
|                                           |                                |                                  | 84100                        | 8570        | 1.83        |                                           |                                |                                  | 84100                        | 8570        | 2.21        | 5 - 6205DB              | - 231        |                 | B-112                   | B-129        | B-148        |
| 6.28                                      | 5070                           | 516                              | 104000                       | 10600       | 2.47        |                                           | 4200                           | 428                              | 104000                       | 10600       | 2.98        | 5 - 6215DA              | - 231        |                 | B-112                   | B-129        | B-148        |
|                                           |                                |                                  | 140000                       | 14200       | 2.92        |                                           |                                |                                  | 132000                       | 13500       | 3.05        | 5 - 6225DA              | - 231        |                 | B-113                   | B-130        | B-149        |
|                                           |                                |                                  | 140000                       | 14200       | 2.92        |                                           |                                |                                  | 132000                       | 13500       | 3.53        | 5 - 6225DB              | - 231        |                 | B-113                   | B-130        | B-149        |

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.



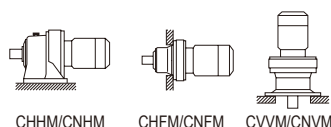
## Selection Tables Gearmotors



| 3.7 kW         |       | n: Motor Speed |      |     |           |
|----------------|-------|----------------|------|-----|-----------|
|                |       | Hz             | 50Hz |     | 60Hz      |
|                |       | P              | 4    | 6   | 4 6       |
| n <sub>1</sub> | r/min |                | 1450 | 980 | 1750 1165 |

| 50Hz                           |                                   |                              |        |       |      | 60Hz                           |                                   |                              |        |       |      | Nomenclature               |            |                 | Page of Dimension Sheet |       |       |
|--------------------------------|-----------------------------------|------------------------------|--------|-------|------|--------------------------------|-----------------------------------|------------------------------|--------|-------|------|----------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    |      | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    |      | Input Capacity -<br>Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVM  |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |      | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |      |                            |            |                 | CHHM                    | CHFM  | CVVM  |
| 1.16                           | 20500                             | 2090                         | 179000 | 18200 | *    | 1.40                           | 20500                             | 2090                         | 179000 | 18200 | *    | 5 -                        | 6235DA     | - 1247          | B-114                   | B-131 | B-150 |
|                                | 27300                             | 2790                         | 208000 | 21200 | 0.94 |                                | 22700                             | 2310                         | 208000 | 21200 | 1.14 | 5 -                        | 6245DA     | - 1247          | B-114                   | B-131 | B-150 |
| 0.980                          | 22600                             | 2310                         | 208000 | 21200 | *    | 1.18                           | 22600                             | 2310                         | 208000 | 21200 | *    | 5 -                        | 6245DA     | - 1479          | B-114                   | B-131 | B-150 |
|                                | 32400                             | 3310                         | 258000 | 26300 | 0.96 |                                | 26900                             | 2740                         | 258000 | 26300 | 1.15 | 5 -                        | 6255DA     | - 1479          | B-115                   | B-132 | B-151 |
| 0.784                          | 40600                             | 4130                         | 258000 | 26300 | 0.85 | 0.946                          | 33600                             | 3430                         | 258000 | 26300 | 1.03 | 5 -                        | 6255DA     | - 1849          | B-115                   | B-132 | B-151 |
| 0.702                          | 34500                             | 3520                         | 258000 | 26300 | *    | 0.847                          | 34500                             | 3520                         | 258000 | 26300 | *    | 5 -                        | 6255DA     | - 2065          | B-115                   | B-132 | B-151 |
| 0.572                          | 34500                             | 3520                         | 258000 | 26300 | *    | 0.690                          | 34500                             | 3520                         | 258000 | 26300 | *    | 5 -                        | 6255DA     | - 2537          | B-115                   | B-132 | B-151 |
| 0.476                          | 31000                             | 3160                         | 258000 | 26300 | *    | 0.575                          | 31000                             | 3160                         | 258000 | 26300 | *    | 5 -                        | 6255DA     | - 3045          | B-115                   | B-132 | B-151 |
| 0.417                          | 34500                             | 3520                         | 258000 | 26300 | *    | 0.503                          | 34500                             | 3520                         | 258000 | 26300 | *    | 5 -                        | 6255DA     | - 3481          | B-115                   | B-132 | B-151 |
| 0.327                          | 31000                             | 3160                         | 258000 | 26300 | *    | 0.394                          | 31000                             | 3160                         | 258000 | 26300 | *    | 5 -                        | 6255DA     | - 4437          | B-115                   | B-132 | B-151 |
| 0.282                          | 34500                             | 3520                         | 258000 | 26300 | *    | 0.341                          | 34500                             | 3520                         | 258000 | 26300 | *    | 5 -                        | 6255DA     | - 5133          | B-115                   | B-132 | B-151 |
| 0.235                          | 31000                             | 3160                         | 258000 | 26300 | *    | 0.283                          | 31000                             | 3160                         | 258000 | 26300 | *    | 5 -                        | 6255DA     | - 6177          | B-115                   | B-132 | B-151 |
| 0.192                          | 31000                             | 3160                         | 258000 | 26300 | *    | 0.231                          | 31000                             | 3160                         | 258000 | 26300 | *    | 5 -                        | 6255DA     | - 7569          | B-115                   | B-132 | B-151 |

GEARMOTORS

Selection Tables  
3.7 kW, 5.5 kW

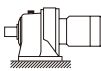
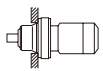
| 5.5 kW         |       | n: Motor Speed |      |     |           |
|----------------|-------|----------------|------|-----|-----------|
|                |       | Hz             | 50Hz |     | 60Hz      |
|                |       | P              | 4    | 6   | 4 6       |
| n <sub>1</sub> | r/min |                | 1450 | 980 | 1750 1165 |

| 50Hz                           |                       |                              |       |       |      | 60Hz                           |                       |                              |       |       |      | Nomenclature               |            |                 | Page of Dimension Sheet |       |       |
|--------------------------------|-----------------------|------------------------------|-------|-------|------|--------------------------------|-----------------------|------------------------------|-------|-------|------|----------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro |       | SF    |      | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro |       | SF    |      | Input Capacity -<br>Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVM  |
| [r/min]                        | [N·m]                 | [kgf·m]                      | [N]   | [kgf] |      | [r/min]                        | [N·m]                 | [kgf·m]                      | [N]   | [kgf] |      |                            |            |                 | CHHM                    | CHFM  | CVVM  |
| 580                            | 86.0                  | 8.77                         | 2410  | 246   | 1.17 | 700                            | 71.3                  | 7.27                         | 2330  | 238   | 1.17 | 8 -                        | 6115SK     | - 2.5 (K)       | B-99                    | -     | B-134 |
| 483                            | 103                   | 10.5                         | 2530  | 258   | 1.20 | 583                            | 85.5                  | 8.72                         | 2450  | 250   | 1.20 | 8 -                        | 6115SK     | - 3 (K)         | B-99                    | -     | B-134 |
| 363                            | 138                   | 14.0                         | 2640  | 269   | 1.22 | 438                            | 114                   | 11.6                         | 2580  | 263   | 1.22 | 8 -                        | 6115SK     | - 4 (K)         | B-99                    | -     | B-134 |
| 290                            | 172                   | 17.5                         | 2690  | 274   | 1.05 | 350                            | 143                   | 14.5                         | 2640  | 269   | 1.05 | 8 -                        | 6115SK     | - 5 (K)         | B-99                    | -     | B-134 |
| 242                            | 206                   | 21.0                         | 2710  | 276   | 0.96 | 292                            | 171                   | 17.4                         | 2700  | 275   | 0.96 | 8 -                        | 6115SK     | - 6 (K)         | B-99                    | -     | B-134 |
|                                |                       |                              | 5140  | 524   | 1.27 |                                |                       |                              | 4850  | 494   | 1.06 | 8 -                        | 6125       | - 6             | B-101                   | B-117 | B-136 |
|                                |                       |                              | 6060  | 617   | 1.71 |                                |                       |                              | 5710  | 582   | 1.71 | 8 -                        | 6130       | - 6             | B-102                   | B-118 | B-137 |
|                                |                       |                              | 6060  | 617   | 2.05 |                                |                       |                              | 5710  | 582   | 2.05 | 8 -                        | 6135       | - 6             | B-102                   | B-118 | B-137 |
|                                |                       |                              | 9370  | 955   | 2.36 |                                |                       |                              | 8860  | 903   | 2.36 | 8 -                        | 6140       | - 6             | B-102                   | B-118 | B-137 |
| 181                            | 275                   | 28.1                         | 9370  | 955   | 2.75 | 219                            | 228                   | 23.3                         | 8860  | 903   | 2.75 | 8 -                        | 6145       | - 6             | B-102                   | B-118 | B-137 |
|                                |                       |                              | 2680  | 273   | 0.84 |                                |                       |                              | 2710  | 276   | 0.84 | 8 -                        | 6115SK     | - 8 (K)         | B-99                    | -     | B-134 |
|                                |                       |                              | 5710  | 582   | 1.26 |                                |                       |                              | 5400  | 550   | 1.26 | 8 -                        | 6125       | - 8             | B-101                   | B-117 | B-136 |
|                                |                       |                              | 6740  | 687   | 1.71 |                                |                       |                              | 6360  | 648   | 1.71 | 8 -                        | 6130       | - 8             | B-102                   | B-118 | B-137 |
|                                |                       |                              | 6740  | 687   | 2.05 |                                |                       |                              | 6360  | 648   | 2.05 | 8 -                        | 6135       | - 8             | B-102                   | B-118 | B-137 |
| 132                            | 379                   | 38.6                         | 10400 | 1060  | 2.36 | 159                            | 314                   | 32.0                         | 9820  | 1000  | 2.36 | 8 -                        | 6140       | - 8             | B-102                   | B-118 | B-137 |
|                                |                       |                              | 10400 | 1060  | 2.75 |                                |                       |                              | 9820  | 1000  | 2.75 | 8 -                        | 6145       | - 8             | B-102                   | B-118 | B-137 |
|                                |                       |                              | 6450  | 658   | 1.08 |                                |                       |                              | 6100  | 622   | 1.08 | 8 -                        | 6125       | - 11            | B-101                   | B-117 | B-136 |
|                                |                       |                              | 7680  | 783   | 1.71 |                                |                       |                              | 7240  | 739   | 1.71 | 8 -                        | 6130       | - 11            | B-102                   | B-118 | B-137 |
|                                |                       |                              | 7680  | 783   | 2.05 |                                |                       |                              | 7240  | 739   | 2.05 | 8 -                        | 6135       | - 11            | B-102                   | B-118 | B-137 |
|                                |                       |                              | 11600 | 1190  | 2.36 |                                |                       |                              | 11000 | 1120  | 2.36 | 8 -                        | 6140       | - 11            | B-102                   | B-118 | B-137 |
|                                |                       |                              | 11600 | 1190  | 2.75 |                                |                       |                              | 11000 | 1120  | 2.75 | 8 -                        | 6145       | - 11            | B-102                   | B-118 | B-137 |
|                                |                       |                              |       |       |      |                                |                       |                              |       |       |      |                            |            |                 |                         |       |       |

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

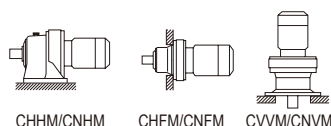


## Selection Tables Gearmotors

| n <sub>1</sub> : Motor Speed   |                       |         |                              |       |      |                                |                       |         |                                                                                                                                                                                                                                                                                                    |              |      |                            |                         |                      |       |       |       |     |      |      |       |       |       |
|--------------------------------|-----------------------|---------|------------------------------|-------|------|--------------------------------|-----------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------|----------------------------|-------------------------|----------------------|-------|-------|-------|-----|------|------|-------|-------|-------|
| 5.5 kW                         |                       |         | Hz                           |       | 50Hz |                                | 60Hz                  |         | <br>CHHM/CNHM <br>CHFM/CNFM <br>CNVM/CVVM |              |      |                            |                         |                      |       |       |       |     |      |      |       |       |       |
|                                |                       |         | P                            |       | 4    | 6                              | 4                     | 6       |                                                                                                                                                                                                                                                                                                    |              |      |                            |                         |                      |       |       |       |     |      |      |       |       |       |
|                                |                       |         | n <sub>1</sub>               | r/min | 1450 | 980                            | 1750                  | 1165    |                                                                                                                                                                                                                                                                                                    |              |      |                            |                         |                      |       |       |       |     |      |      |       |       |       |
| 50Hz                           |                       |         |                              |       |      | 60Hz                           |                       |         |                                                                                                                                                                                                                                                                                                    | Nomenclature |      |                            | Page of Dimension Sheet |                      |       |       |       |     |      |      |       |       |       |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro                                                                                                                                                                                                                                                                       |              | SF   | Input Capacity -<br>Symbol | Frame Size              | -<br>Reduction Ratio | CNHM  | CNFM  | CNVM  |     |      |      |       |       |       |
| [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      | [r/min]                        | [N·m]                 | [kgf·m] | [N]                                                                                                                                                                                                                                                                                                | [kgf]        |      |                            |                         |                      | CHHM  | CHFM  | CVVM  |     |      |      |       |       |       |
| 112                            | 447                   | 45.6    | 6630                         | 676   | 1.08 | 135                            | 371                   | 37.8    | 6280                                                                                                                                                                                                                                                                                               | 640          | 1.08 | 8 -                        | 6125                    | - 13                 | B-101 | B-117 | B-136 |     |      |      |       |       |       |
|                                |                       |         | 7980                         | 814   | 1.71 |                                |                       |         | 7530                                                                                                                                                                                                                                                                                               | 768          | 1.71 |                            |                         |                      |       |       |       | 8 - | 6130 | - 13 | B-102 | B-118 | B-137 |
|                                |                       |         | 7980                         | 814   | 1.85 |                                |                       |         | 7530                                                                                                                                                                                                                                                                                               | 768          | 2.05 |                            |                         |                      |       |       |       | 8 - | 6135 | - 13 | B-102 | B-118 | B-137 |
|                                |                       |         | 11900                        | 1210  | 2.36 |                                |                       |         | 11300                                                                                                                                                                                                                                                                                              | 1150         | 2.36 |                            |                         |                      |       |       |       | 8 - | 6140 | - 13 | B-102 | B-118 | B-137 |
|                                |                       |         | 11900                        | 1210  | 2.75 |                                |                       |         | 11300                                                                                                                                                                                                                                                                                              | 1150         | 2.75 |                            |                         |                      |       |       |       | 8 - | 6145 | - 13 | B-102 | B-118 | B-137 |
| 96.7                           | 516                   | 52.6    | 7100                         | 724   | 1.08 | 117                            | 428                   | 43.6    | 6730                                                                                                                                                                                                                                                                                               | 686          | 1.08 | 8 -                        | 6125                    | - 15                 | B-101 | B-117 | B-136 |     |      |      |       |       |       |
|                                |                       |         | 8130                         | 829   | 1.41 |                                |                       |         | 7680                                                                                                                                                                                                                                                                                               | 783          | 1.41 |                            |                         |                      |       |       |       | 8 - | 6130 | - 15 | B-102 | B-118 | B-137 |
|                                |                       |         | 8130                         | 829   | 1.63 |                                |                       |         | 7680                                                                                                                                                                                                                                                                                               | 783          | 1.63 |                            |                         |                      |       |       |       | 8 - | 6135 | - 15 | B-102 | B-118 | B-137 |
|                                |                       |         | 12400                        | 1270  | 2.18 |                                |                       |         | 11800                                                                                                                                                                                                                                                                                              | 1200         | 2.18 |                            |                         |                      |       |       |       | 8 - | 6140 | - 15 | B-102 | B-118 | B-137 |
|                                |                       |         | 12400                        | 1270  | 2.64 |                                |                       |         | 11800                                                                                                                                                                                                                                                                                              | 1200         | 2.75 |                            |                         |                      |       |       |       | 8 - | 6145 | - 15 | B-102 | B-118 | B-137 |
| 85.3                           | 585                   | 59.6    | 7150                         | 729   | 1.03 | 103                            | 485                   | 49.4    | 6780                                                                                                                                                                                                                                                                                               | 691          | 1.03 | 8 -                        | 6125                    | - 17                 | B-101 | B-117 | B-136 |     |      |      |       |       |       |
|                                |                       |         | 8710                         | 888   | 1.32 |                                |                       |         | 8230                                                                                                                                                                                                                                                                                               | 839          | 1.32 |                            |                         |                      |       |       |       | 8 - | 6130 | - 17 | B-102 | B-118 | B-137 |
|                                |                       |         | 8710                         | 888   | 1.51 |                                |                       |         | 8230                                                                                                                                                                                                                                                                                               | 839          | 1.51 |                            |                         |                      |       |       |       | 8 - | 6135 | - 17 | B-102 | B-118 | B-137 |
|                                |                       |         | 13000                        | 1320  | 1.84 |                                |                       |         | 12300                                                                                                                                                                                                                                                                                              | 1250         | 1.84 |                            |                         |                      |       |       |       | 8 - | 6140 | - 17 | B-102 | B-118 | B-137 |
|                                |                       |         | 13000                        | 1320  | 2.18 |                                |                       |         | 12300                                                                                                                                                                                                                                                                                              | 1250         | 2.18 |                            |                         |                      |       |       |       | 8 - | 6145 | - 17 | B-102 | B-118 | B-137 |
| 69.0                           | 723                   | 73.7    | 15300                        | 1550  | 2.38 | 83.3                           | 599                   | 61.0    | 14400                                                                                                                                                                                                                                                                                              | 1460         | 2.38 | 8 -                        | 6160                    | - 17                 | B-103 | B-119 | B-138 |     |      |      |       |       |       |
|                                |                       |         | 7780                         | 793   | 0.87 |                                |                       |         | 7390                                                                                                                                                                                                                                                                                               | 753          | 0.89 |                            |                         |                      |       |       |       | 8 - | 6125 | - 21 | B-101 | B-117 | B-136 |
|                                |                       |         | 9260                         | 944   | 1.08 |                                |                       |         | 8760                                                                                                                                                                                                                                                                                               | 893          | 1.12 |                            |                         |                      |       |       |       | 8 - | 6130 | - 21 | B-102 | B-118 | B-137 |
|                                |                       |         | 9260                         | 944   | 1.22 |                                |                       |         | 8760                                                                                                                                                                                                                                                                                               | 893          | 1.37 |                            |                         |                      |       |       |       | 8 - | 6135 | - 21 | B-102 | B-118 | B-137 |
|                                |                       |         | 13900                        | 1410  | 1.57 |                                |                       |         | 13100                                                                                                                                                                                                                                                                                              | 1340         | 1.57 |                            |                         |                      |       |       |       | 8 - | 6140 | - 21 | B-102 | B-118 | B-137 |
| 58.0                           | 860                   | 87.7    | 13900                        | 1410  | 1.73 | 70.0                           | 713                   | 72.7    | 13100                                                                                                                                                                                                                                                                                              | 1340         | 2.00 | 8 -                        | 6145                    | - 21                 | B-102 | B-118 | B-137 |     |      |      |       |       |       |
|                                |                       |         | 16400                        | 1670  | 2.35 |                                |                       |         | 15400                                                                                                                                                                                                                                                                                              | 1570         | 2.35 |                            |                         |                      |       |       |       | 8 - | 6160 | - 21 | B-103 | B-119 | B-138 |
|                                |                       |         | 16400                        | 1670  | 2.91 |                                |                       |         | 15400                                                                                                                                                                                                                                                                                              | 1570         | 2.93 |                            |                         |                      |       |       |       | 8 - | 6165 | - 21 | B-103 | B-119 | B-138 |
|                                |                       |         | 9580                         | 977   | 1.05 |                                |                       |         | 9070                                                                                                                                                                                                                                                                                               | 925          | 1.08 |                            |                         |                      |       |       |       | 8 - | 6135 | - 25 | B-102 | B-118 | B-137 |
|                                |                       |         | 14500                        | 1480  | 1.25 |                                |                       |         | 13800                                                                                                                                                                                                                                                                                              | 1400         | 1.25 |                            |                         |                      |       |       |       | 8 - | 6140 | - 25 | B-102 | B-118 | B-137 |
| 50.0                           | 998                   | 102     | 14500                        | 1480  | 1.44 | 60.3                           | 827                   | 84.3    | 13800                                                                                                                                                                                                                                                                                              | 1400         | 1.44 | 8 -                        | 6145                    | - 25                 | B-102 | B-118 | B-137 |     |      |      |       |       |       |
|                                |                       |         | 17100                        | 1740  | 1.79 |                                |                       |         | 16100                                                                                                                                                                                                                                                                                              | 1640         | 1.79 |                            |                         |                      |       |       |       | 8 - | 6160 | - 25 | B-103 | B-119 | B-138 |
|                                |                       |         | 17100                        | 1740  | 2.44 |                                |                       |         | 16100                                                                                                                                                                                                                                                                                              | 1640         | 2.75 |                            |                         |                      |       |       |       | 8 - | 6165 | - 25 | B-103 | B-119 | B-138 |
|                                |                       |         | 19200                        | 1960  | 2.84 |                                |                       |         | 18100                                                                                                                                                                                                                                                                                              | 1840         | 2.87 |                            |                         |                      |       |       |       | 8 - | 6170 | - 25 | B-103 | B-119 | B-138 |
|                                |                       |         | 10000                        | 1020  | 0.89 |                                |                       |         | 9500                                                                                                                                                                                                                                                                                               | 968          | 1.03 |                            |                         |                      |       |       |       | 8 - | 6135 | - 29 | B-102 | B-118 | B-137 |
| 41.4                           | 1200                  | 123     | 14800                        | 1510  | 1.08 | 50.0                           | 998                   | 102     | 14100                                                                                                                                                                                                                                                                                              | 1430         | 1.08 | 8 -                        | 6140                    | - 29                 | B-102 | B-118 | B-137 |     |      |      |       |       |       |
|                                |                       |         | 14800                        | 1510  | 1.37 |                                |                       |         | 14100                                                                                                                                                                                                                                                                                              | 1430         | 1.37 |                            |                         |                      |       |       |       | 8 - | 6145 | - 29 | B-102 | B-118 | B-137 |
|                                |                       |         | 17800                        | 1810  | 1.74 |                                |                       |         | 16800                                                                                                                                                                                                                                                                                              | 1710         | 1.91 |                            |                         |                      |       |       |       | 8 - | 6160 | - 29 | B-103 | B-119 | B-138 |
|                                |                       |         | 17800                        | 1810  | 2.07 |                                |                       |         | 16800                                                                                                                                                                                                                                                                                              | 1710         | 2.07 |                            |                         |                      |       |       |       | 8 - | 6165 | - 29 | B-103 | B-119 | B-138 |
|                                |                       |         | 20200                        | 2060  | 2.45 |                                |                       |         | 19100                                                                                                                                                                                                                                                                                              | 1940         | 2.60 |                            |                         |                      |       |       |       | 8 - | 6170 | - 29 | B-103 | B-119 | B-138 |
| 33.7                           | 1480                  | 151     | 15900                        | 1620  | 1.14 | 40.7                           | 1230                  | 125     | 15000                                                                                                                                                                                                                                                                                              | 1530         | 1.37 | 8 -                        | 6145                    | - 35                 | B-102 | B-118 | B-137 |     |      |      |       |       |       |
|                                |                       |         | 18800                        | 1920  | 1.46 |                                |                       |         | 17800                                                                                                                                                                                                                                                                                              | 1810         | 1.76 |                            |                         |                      |       |       |       | 8 - | 6160 | - 35 | B-103 | B-119 | B-138 |
|                                |                       |         | 18800                        | 1920  | 1.74 |                                |                       |         | 17800                                                                                                                                                                                                                                                                                              | 1810         | 2.07 |                            |                         |                      |       |       |       | 8 - | 6165 | - 35 | B-103 | B-119 | B-138 |
|                                |                       |         | 21400                        | 2180  | 2.04 |                                |                       |         | 20200                                                                                                                                                                                                                                                                                              | 2060         | 2.18 |                            |                         |                      |       |       |       | 8 - | 6170 | - 35 | B-103 | B-119 | B-138 |
|                                |                       |         | 21400                        | 2180  | 2.62 |                                |                       |         | 20200                                                                                                                                                                                                                                                                                              | 2060         | 2.75 |                            |                         |                      |       |       |       | 8 - | 6175 | - 35 | B-103 | B-119 | B-138 |
| 28.4                           | 1760                  | 179     | 15100                        | 1540  | 0.85 | 34.3                           | 1450                  | 148     | 15600                                                                                                                                                                                                                                                                                              | 1590         | 0.98 | 8 -                        | 6145                    | - 43                 | B-102 | B-118 | B-137 |     |      |      |       |       |       |
|                                |                       |         | 20000                        | 2040  | 1.17 |                                |                       |         | 18900                                                                                                                                                                                                                                                                                              | 1930         | 1.35 |                            |                         |                      |       |       |       | 8 - | 6160 | - 43 | B-103 | B-119 | B-138 |
|                                |                       |         | 20000                        | 2040  | 1.42 |                                |                       |         | 18900                                                                                                                                                                                                                                                                                              | 1930         | 1.44 |                            |                         |                      |       |       |       | 8 - | 6165 | - 43 | B-103 | B-119 | B-138 |
|                                |                       |         | 22800                        | 2320  | 1.65 |                                |                       |         | 21500                                                                                                                                                                                                                                                                                              | 2190         | 1.77 |                            |                         |                      |       |       |       | 8 - | 6170 | - 43 | B-103 | B-119 | B-138 |
|                                |                       |         | 22800                        | 2320  | 2.05 |                                |                       |         | 21500                                                                                                                                                                                                                                                                                              | 2190         | 2.05 |                            |                         |                      |       |       |       | 8 - | 6175 | - 43 | B-103 | B-119 | B-138 |
| 28.4                           | 1760                  | 179     | 30900                        | 3150  | 2.75 | 34.3                           | 1450                  | 148     | 29100                                                                                                                                                                                                                                                                                              | 2960         | 2.75 | 8 -                        | 6180                    | - 43                 | B-104 | B-120 | B-139 |     |      |      |       |       |       |
|                                |                       |         | 20800                        | 2120  | 1.00 |                                |                       |         | 19600                                                                                                                                                                                                                                                                                              | 2000         | 1.05 |                            |                         |                      |       |       |       | 8 - | 6160 | - 51 | B-103 | B-119 | B-138 |
|                                |                       |         | 20800                        | 2120  | 1.20 |                                |                       |         | 19600                                                                                                                                                                                                                                                                                              | 2000         | 1.37 |                            |                         |                      |       |       |       | 8 - | 6165 | - 51 | B-103 | B-119 | B-138 |
|                                |                       |         | 23700                        | 2420  | 1.39 |                                |                       |         | 22400                                                                                                                                                                                                                                                                                              | 2280         | 1.53 |                            |                         |                      |       |       |       | 8 - | 6170 | - 51 | B-103 | B-119 | B-138 |
|                                |                       |         | 23700                        | 2420  | 1.79 |                                |                       |         | 22400                                                                                                                                                                                                                                                                                              | 2280         | 2.05 |                            |                         |                      |       |       |       | 8 - | 6175 | - 51 | B-103 | B-119 | B-138 |
| 28.4                           | 1760                  | 179     | 31900                        | 3260  | 2.18 | 34.3                           | 1450                  | 148     | 30100                                                                                                                                                                                                                                                                                              | 3070         | 2.18 | 8 -                        | 6180                    | - 51                 | B-104 | B-120 | B-139 |     |      |      |       |       |       |
|                                |                       |         | 31900                        | 3260  | 2.75 |                                |                       |         | 30100                                                                                                                                                                                                                                                                                              | 3070         | 2.75 |                            |                         |                      |       |       |       | 8 - | 6185 | - 51 | B-104 | B-120 | B-139 |
|                                |                       |         | 20800                        | 2120  | 1.00 |                                |                       |         | 19600                                                                                                                                                                                                                                                                                              | 2000         | 1.05 |                            |                         |                      |       |       |       | 8 - | 6160 | - 51 | B-103 | B-119 | B-138 |
|                                |                       |         | 20800                        | 2120  | 1.20 |                                |                       |         | 19600                                                                                                                                                                                                                                                                                              | 2000         | 1.37 |                            |                         |                      |       |       |       | 8 - | 6165 | - 51 | B-103 | B-119 | B-138 |
|                                |                       |         | 23700                        | 2420  | 1.39 |                                |                       |         | 22400                                                                                                                                                                                                                                                                                              | 2280         | 1.53 |                            |                         |                      |       |       |       | 8 - | 6170 | - 51 | B-103 | B-119 | B-138 |



## Selection Tables Gearmotors



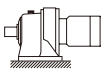
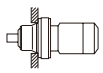
|        |                |       |      |     |      |      |
|--------|----------------|-------|------|-----|------|------|
| 5.5 kW | Hz             |       | 50Hz |     | 60Hz |      |
|        | P              |       | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

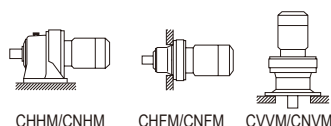
| 50Hz                                      |                                        |                                           |       |      | 60Hz                                      |                                        |                                           |       |      | Nomenclature            |            |                 | Page of Dimension Sheet |       |       |
|-------------------------------------------|----------------------------------------|-------------------------------------------|-------|------|-------------------------------------------|----------------------------------------|-------------------------------------------|-------|------|-------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF    |      | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF    |      | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVN  |
| 24.6                                      | 2030                                   | 207                                       | 22100 | 2250 | 29.7                                      | 1680                                   | 171                                       | 21700 | 2220 | 8 -                     | 6165       | - 59            | B-103                   | B-119 | B-138 |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
| 20.4                                      | 2440                                   | 249                                       | 22100 | 2250 | 24.6                                      | 2020                                   | 206                                       | 21600 | 2200 | 8 -                     | 6165       | - 71            | B-103                   | B-119 | B-138 |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
| 16.7                                      | 2990                                   | 305                                       | 22100 | 2250 | 20.1                                      | 2480                                   | 253                                       | 26400 | 2690 | 8 -                     | 6175       | - 87            | B-103                   | B-119 | B-138 |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
| 13.9                                      | 2100                                   | 214                                       | 22100 | 2250 | 16.8                                      | 2810                                   | 286                                       | 28500 | 2900 | 8 -                     | 6175DC     | - 104           | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
| 12.0                                      | 2530                                   | 258                                       | 22100 | 2250 | 14.5                                      | 3270                                   | 333                                       | 29500 | 3010 | 8 -                     | 6175DC     | - 121           | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
| 10.1                                      | 3150                                   | 321                                       | 22100 | 2250 | 12.2                                      | 3860                                   | 394                                       | 29500 | 3010 | 8 -                     | 6175DC     | - 143           | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
| 8.79                                      | 4060                                   | 414                                       | 22100 | 2250 | 10.6                                      | 4460                                   | 454                                       | 29500 | 3010 | 8 -                     | 6175DC     | - 165           | B-111                   | B-127 | B-146 |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |
|                                           |                                        |                                           |       |      |                                           |                                        |                                           |       |      |                         |            |                 |                         |       |       |

6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

## Selection Tables Gearmotors

| 5.5 kW                         |                                   | n <sub>1</sub> : Motor Speed |        |       |      |                                |                                   |  |        |       |  |                            |            |  |                         |       |       |
|--------------------------------|-----------------------------------|------------------------------|--------|-------|------|--------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|--------|-------|-------------------------------------------------------------------------------------|----------------------------|------------|-------------------------------------------------------------------------------------|-------------------------|-------|-------|
|                                |                                   | Hz                           |        | 50Hz  |      | 60Hz                           |                                   |                                                                                     |        |       |                                                                                     |                            |            |                                                                                     |                         |       |       |
|                                |                                   | P                            |        | 4     | 6    | 4                              | 6                                 |                                                                                     |        |       |                                                                                     |                            |            |                                                                                     |                         |       |       |
|                                |                                   | n <sub>1</sub>               | r/min  | 1450  | 980  | 1750                           | 1165                              |                                                                                     |        |       |                                                                                     |                            |            |                                                                                     |                         |       |       |
| 50Hz                           |                                   |                              |        |       |      | 60Hz                           |                                   |                                                                                     |        |       |                                                                                     | Nomenclature               |            |                                                                                     | Page of Dimension Sheet |       |       |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    |      | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro                                                        |        | SF    |                                                                                     | Input Capacity –<br>Symbol | Frame Size | Reduction Ratio                                                                     | CNHM                    | CNFM  | CNVM  |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |      | [r/min]                        | [N·m]                             | [kgf·m]                                                                             | [N]    | [kgf] |                                                                                     |                            |            |                                                                                     | CHHM                    | CHFM  | CVVM  |
| 7.44                           | 4060                              | 414                          | 41700  | 4250  | *    | 8.97                           | 4060                              | 414                                                                                 | 41700  | 4250  | *                                                                                   | 8 -                        | 6180DB     | - 195                                                                               | B-111                   | B-127 | B-146 |
|                                | 4920                              | 502                          | 41700  | 4250  | *    |                                | 4920                              | 502                                                                                 | 41700  | 4250  | *                                                                                   | 8 -                        | 6185DB     | - 195                                                                               | B-111                   | B-127 | B-146 |
|                                |                                   |                              | 58900  | 6000  | 1.00 |                                |                                   |                                                                                     | 59000  | 6010  | 1.08                                                                                | 8 -                        | 6190DA     | - 195                                                                               | B-111                   | B-128 | B-147 |
|                                |                                   |                              | 58900  | 6000  | 1.00 |                                |                                   |                                                                                     | 59000  | 6010  | 1.21                                                                                | 8 -                        | 6190DB     | - 195                                                                               | B-112                   | B-128 | B-147 |
|                                |                                   |                              | 58900  | 6000  | 1.02 |                                |                                   |                                                                                     | 59000  | 6010  | 1.08                                                                                | 8 -                        | 6195DA     | - 195                                                                               | B-111                   | B-128 | B-147 |
|                                |                                   |                              | 58900  | 6000  | 1.24 |                                |                                   |                                                                                     | 59000  | 6010  | 1.50                                                                                | 8 -                        | 6195DB     | - 195                                                                               | B-112                   | B-128 | B-147 |
|                                | 6360                              | 648                          | 84100  | 8570  | 1.46 |                                | 5270                              | 537                                                                                 | 84100  | 8570  | 1.76                                                                                | 8 -                        | 6205DB     | - 195                                                                               | B-112                   | B-129 | B-148 |
|                                |                                   |                              | 104000 | 10600 | 1.86 |                                |                                   |                                                                                     | 104000 | 10600 | 2.08                                                                                | 8 -                        | 6215DA     | - 195                                                                               | B-112                   | B-129 | B-148 |
|                                |                                   |                              | 104000 | 10600 | 1.91 |                                |                                   |                                                                                     | 104000 | 10600 | 2.31                                                                                | 8 -                        | 6215DB     | - 195                                                                               | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 131000 | 13300 | 1.86 |                                |                                   |                                                                                     | 124000 | 12600 | 2.08                                                                                | 8 -                        | 6225DA     | - 195                                                                               | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 131000 | 13300 | 2.28 |                                |                                   |                                                                                     | 124000 | 12600 | 2.75                                                                                | 8 -                        | 6225DB     | - 195                                                                               | B-113                   | B-130 | B-149 |
|                                | 6.28                              | 5000                         | 510    | 41700 | 4250 |                                | *                                 | 7.58                                                                                | 5000   | 510   | 41700                                                                               | 4250                       | *          | 8 -                                                                                 | 6185DB                  | - 231 | B-111 |
|                                |                                   |                              | 59000  | 6010  | 1.06 |                                |                                   |                                                                                     | 59000  | 6010  | 1.08                                                                                | 8 -                        | 6195DA     | - 231                                                                               | B-111                   | B-128 | B-147 |
|                                |                                   |                              | 59000  | 6010  | 1.06 |                                |                                   |                                                                                     | 59000  | 6010  | 1.28                                                                                | 8 -                        | 6195DB     | - 231                                                                               | B-112                   | B-128 | B-147 |
|                                |                                   |                              | 84100  | 8570  | 1.23 |                                |                                   |                                                                                     | 84100  | 8570  | 1.49                                                                                | 8 -                        | 6205DB     | - 231                                                                               | B-112                   | B-129 | B-148 |
| 7530                           |                                   | 768                          | 104000 | 10600 | 1.66 | 6240                           | 636                               |                                                                                     | 104000 | 10600 | 2.00                                                                                | 8 -                        | 6215DA     | - 231                                                                               | B-112                   | B-129 | B-148 |
|                                |                                   |                              | 139000 | 14200 | 1.97 |                                |                                   |                                                                                     | 132000 | 13400 | 2.08                                                                                | 8 -                        | 6225DA     | - 231                                                                               | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 139000 | 14200 | 1.97 |                                |                                   |                                                                                     | 132000 | 13400 | 2.37                                                                                | 8 -                        | 6225DB     | - 231                                                                               | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 173000 | 17700 | 2.51 |                                |                                   |                                                                                     | 164000 | 16700 | 3.03                                                                                | 8 -                        | 6235DA     | - 231                                                                               | B-114                   | B-131 | B-150 |
| 5.31                           | 5000                              | 510                          | 41700  | 4250  | *    | 6.41                           | 5000                              | 510                                                                                 | 41700  | 4250  | *                                                                                   | 8 -                        | 6185DB     | - 273                                                                               | B-111                   | B-127 | B-146 |
|                                | 6380                              | 650                          | 59000  | 6010  | *    |                                | 6380                              | 650                                                                                 | 59000  | 6010  | *                                                                                   | 8 -                        | 6190DA     | - 273                                                                               | B-111                   | B-128 | B-147 |
|                                |                                   |                              | 59000  | 6010  | 0.89 |                                |                                   |                                                                                     | 59000  | 6010  | 1.08                                                                                | 8 -                        | 6195DA     | - 273                                                                               | B-111                   | B-128 | B-147 |
|                                |                                   |                              | 84100  | 8570  | 0.94 |                                |                                   |                                                                                     | 84100  | 8570  | 1.07                                                                                | 8 -                        | 6205DA     | - 273                                                                               | B-112                   | B-129 | B-148 |
|                                |                                   |                              | 84100  | 8570  | 1.04 |                                |                                   |                                                                                     | 84100  | 8570  | 1.26                                                                                | 8 -                        | 6205DB     | - 273                                                                               | B-112                   | B-129 | B-148 |
|                                | 8900                              | 907                          | 104000 | 10600 | 1.40 |                                | 7370                              | 752                                                                                 | 104000 | 10600 | 1.70                                                                                | 8 -                        | 6215DA     | - 273                                                                               | B-112                   | B-129 | B-148 |
|                                |                                   |                              | 145000 | 14800 | 1.66 |                                |                                   |                                                                                     | 138000 | 14100 | 2.01                                                                                | 8 -                        | 6225DA     | - 273                                                                               | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 179000 | 18200 | 2.12 |                                |                                   |                                                                                     | 172000 | 17600 | 2.56                                                                                | 8 -                        | 6235DA     | - 273                                                                               | B-114                   | B-131 | B-150 |
| 4.55                           | 6380                              | 650                          | 59000  | 6010  | *    | 5.49                           | 6380                              | 650                                                                                 | 59000  | 6010  | *                                                                                   | 8 -                        | 6190DA     | - 319                                                                               | B-111                   | B-128 | B-147 |
|                                | 7960                              | 811                          | 59000  | 6010  | *    |                                | 7960                              | 811                                                                                 | 59000  | 6010  | *                                                                                   | 8 -                        | 6195DA     | - 319                                                                               | B-111                   | B-128 | B-147 |
|                                | 8080                              | 823                          | 84100  | 8570  | *    |                                | 7590                              | 773                                                                                 | 84100  | 8570  | *                                                                                   | 8 -                        | 6205DA     | - 319                                                                               | B-112                   | B-129 | B-148 |
|                                |                                   |                              | 84100  | 8570  | 0.89 |                                |                                   |                                                                                     | 84100  | 8570  | 1.07                                                                                | 8 -                        | 6205DB     | - 319                                                                               | B-112                   | B-129 | B-148 |
|                                |                                   |                              | 104000 | 10600 | 1.22 |                                |                                   |                                                                                     | 104000 | 10600 | 1.47                                                                                | 8 -                        | 6215DA     | - 319                                                                               | B-112                   | B-129 | B-148 |
|                                | 10400                             | 1060                         | 145000 | 14800 | 1.45 |                                | 8620                              | 878                                                                                 | 143000 | 14600 | 1.75                                                                                | 8 -                        | 6225DA     | - 319                                                                               | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 179000 | 18200 | 1.82 |                                |                                   |                                                                                     | 179000 | 18200 | 2.19                                                                                | 8 -                        | 6235DA     | - 319                                                                               | B-114                   | B-131 | B-150 |
|                                |                                   |                              | 208000 | 21200 | 2.48 |                                |                                   |                                                                                     | 200000 | 20400 | 2.99                                                                                | 8 -                        | 6245DA     | - 319                                                                               | B-114                   | B-131 | B-150 |
| 3.85                           | 7960                              | 811                          | 59000  | 6010  | *    | 4.64                           | 7960                              | 811                                                                                 | 59000  | 6010  | *                                                                                   | 8 -                        | 6195DA     | - 377                                                                               | B-111                   | B-128 | B-147 |
|                                | 8550                              | 872                          | 84100  | 8570  | *    |                                | 8030                              | 819                                                                                 | 84100  | 8570  | *                                                                                   | 8 -                        | 6205DA     | - 377                                                                               | B-112                   | B-129 | B-148 |
|                                |                                   |                              | 104000 | 10600 | 1.03 |                                |                                   |                                                                                     | 104000 | 10600 | 1.24                                                                                | 8 -                        | 6215DA     | - 377                                                                               | B-112                   | B-129 | B-148 |
|                                |                                   |                              | 145000 | 14800 | 1.22 |                                |                                   |                                                                                     | 145000 | 14800 | 1.48                                                                                | 8 -                        | 6225DA     | - 377                                                                               | B-113                   | B-130 | B-149 |
|                                | 12300                             | 1250                         | 179000 | 18200 | 1.54 |                                | 10200                             | 1040                                                                                | 179000 | 18200 | 1.86                                                                                | 8 -                        | 6235DA     | - 377                                                                               | B-114                   | B-131 | B-150 |
|                                |                                   |                              | 208000 | 21200 | 2.10 |                                |                                   |                                                                                     | 208000 | 21200 | 2.53                                                                                | 8 -                        | 6245DA     | - 377                                                                               | B-114                   | B-131 | B-150 |
|                                |                                   | 258000                       | 26300  | 2.64  |      |                                | 258000                            | 26300                                                                               | 3.19   | 8 -   | 6255DA                                                                              | - 377                      | B-115      | B-132                                                                               | B-151                   |       |       |

## Selection Tables Gearmotors

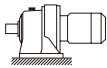
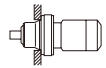


|        |                |       |      |     |      |      |
|--------|----------------|-------|------|-----|------|------|
| 5.5 kW | Hz             |       | 50Hz |     | 60Hz |      |
|        | P              |       | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

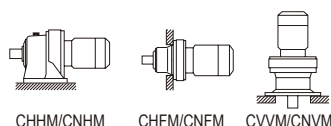
| 50Hz                           |                       |                              |               |              |             | 60Hz                           |                       |                              |             |                   |               | Nomenclature            |              |                 | Page of Dimension Sheet |       |       |
|--------------------------------|-----------------------|------------------------------|---------------|--------------|-------------|--------------------------------|-----------------------|------------------------------|-------------|-------------------|---------------|-------------------------|--------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro |               | SF           |             | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro |             | SF                |               | Input Capacity - Symbol | Frame Size   | Reduction Ratio | CNHM                    | CNFM  | CNVM  |
| [r/min]                        | [N·m]                 | [kgf·m]                      | [N]           | [kgf]        | *           | [r/min]                        | [N·m]                 | [kgf·m]                      | [N]         | [kgf]             | *             |                         |              |                 | CHHM                    | CHFM  | CVVM  |
| 3.07                           | 12700                 | 1290                         | 104000        | 10600        | *           | 3.70                           | 12700                 | 1290                         | 104000      | 10600             | *             | 8 - 6215DA              | - 473        |                 | B-112                   | B-129 | B-148 |
|                                | 15400                 | 1570                         | 104000        | 10600        | 0.82        |                                | 104000                | 10600                        | 0.98        | 8 - 6215DA        | - 473         | B-112                   | B-129        | B-148           |                         |       |       |
|                                |                       |                              | <b>145000</b> | <b>14800</b> | <b>1.04</b> |                                | <b>145000</b>         | <b>14800</b>                 | <b>1.25</b> | <b>8 - 6225DA</b> | <b>- 473</b>  | <b>B-113</b>            | <b>B-130</b> | <b>B-149</b>    |                         |       |       |
|                                |                       |                              | 179000        | 18200        | 1.33        |                                | 179000                | 18200                        | 1.60        | 8 - 6235DA        | - 473         | B-114                   | B-131        | B-150           |                         |       |       |
|                                |                       |                              | 208000        | 21200        | 1.67        |                                | 208000                | 21200                        | 2.02        | 8 - 6245DA        | - 473         | B-114                   | B-131        | B-150           |                         |       |       |
|                                |                       |                              | 258000        | 26300        | 2.24        |                                | 258000                | 26300                        | 2.70        | 8 - 6255DA        | - 473         | B-115                   | B-132        | B-151           |                         |       |       |
| 276000                         | 28100                 | 2.98                         | 276000        | 28100        | 3.60        | 8 - 6265DA                     | - 473                 | B-115                        | B-132       | B-151             |               |                         |              |                 |                         |       |       |
| 2.59                           | 12700                 | 1290                         | 104000        | 10600        | *           | 3.13                           | 12700                 | 1290                         | 104000      | 10600             | *             | 8 - 6215DA              | - 559        |                 | B-112                   | B-129 | B-148 |
|                                | 18200                 | 1860                         | 145000        | 14800        | 0.88        |                                | 145000                | 14800                        | 1.06        | 8 - 6225DA        | - 559         | B-113                   | B-130        | B-149           |                         |       |       |
|                                |                       |                              | 179000        | 18200        | 1.12        |                                | 179000                | 18200                        | 1.36        | 8 - 6235DA        | - 559         | B-114                   | B-131        | B-150           |                         |       |       |
|                                |                       |                              | 208000        | 21200        | 1.42        |                                | 208000                | 21200                        | 1.71        | 8 - 6245DA        | - 559         | B-114                   | B-131        | B-150           |                         |       |       |
|                                |                       |                              | 258000        | 26300        | 1.89        |                                | 258000                | 26300                        | 2.28        | 8 - 6255DA        | - 559         | B-115                   | B-132        | B-151           |                         |       |       |
|                                |                       |                              | 276000        | 28100        | 2.52        |                                | 276000                | 28100                        | 3.05        | 8 - 6265DA        | - 559         | B-115                   | B-132        | B-151           |                         |       |       |
| 2.23                           | 12700                 | 1290                         | 104000        | 10600        | *           | 2.70                           | 12700                 | 1290                         | 104000      | 10600             | *             | 8 - 6215DA              | - 649        |                 | B-112                   | B-129 | B-148 |
|                                | 15900                 | 1620                         | 145000        | 14800        | *           |                                | 15900                 | 1620                         | 145000      | 14800             | *             | 8 - 6225DA              | - 649        | B-113           | B-130                   | B-149 |       |
|                                | 21200                 | 2160                         | 179000        | 18200        | 0.97        |                                | 179000                | 18200                        | 1.17        | 8 - 6235DA        | - 649         | B-114                   | B-131        | B-150           |                         |       |       |
|                                |                       |                              | 208000        | 21200        | 1.22        |                                | 208000                | 21200                        | 1.47        | 8 - 6245DA        | - 649         | B-114                   | B-131        | B-150           |                         |       |       |
|                                |                       |                              | 258000        | 26300        | 1.63        |                                | 258000                | 26300                        | 1.97        | 8 - 6255DA        | - 649         | B-115                   | B-132        | B-151           |                         |       |       |
|                                |                       |                              | 276000        | 28100        | 2.17        |                                | 276000                | 28100                        | 2.62        | 8 - 6265DA        | - 649         | B-115                   | B-132        | B-151           |                         |       |       |
| 1.98                           | 16000                 | 1630                         | 145000        | 14800        | *           | 2.39                           | 16000                 | 1630                         | 145000      | 14800             | *             | 8 - 6225DA              | - 731        |                 | B-113                   | B-130 | B-149 |
|                                | 23800                 | 2430                         | 179000        | 18200        | 0.86        |                                | 179000                | 18200                        | 1.04        | 8 - 6235DA        | - 731         | B-114                   | B-131        | B-150           |                         |       |       |
|                                |                       |                              | 208000        | 21200        | 1.08        |                                | 208000                | 21200                        | 1.31        | 8 - 6245DA        | - 731         | B-114                   | B-131        | B-150           |                         |       |       |
|                                |                       |                              | 258000        | 26300        | 1.45        |                                | 258000                | 26300                        | 1.75        | 8 - 6255DA        | - 731         | B-115                   | B-132        | B-151           |                         |       |       |
|                                |                       |                              | 276000        | 28100        | 1.93        |                                | 276000                | 28100                        | 2.33        | 8 - 6265DA        | - 731         | B-115                   | B-132        | B-151           |                         |       |       |
|                                |                       |                              | 18900         | 1930         | 179000      |                                | 18200                 | *                            | 18900       | 1930              | 179000        | 18200                   | *            | 8 - 6235DA      | - 841                   | B-114 | B-131 |
| 1.72                           | 27400                 | 2790                         | 208000        | 21200        | 0.94        | 2.08                           | 22700                 | 2320                         | 208000      | 21200             | 1.14          | 8 - 6245DA              | - 841        | B-114           | B-131                   | B-150 |       |
|                                |                       |                              | 258000        | 26300        | 1.18        |                                |                       |                              | 258000      | 26300             | 1.43          | 8 - 6255DA              | - 841        | B-115           | B-132                   | B-151 |       |
|                                |                       |                              | 276000        | 28100        | 1.68        |                                |                       |                              | 276000      | 28100             | 2.02          | 8 - 6265DA              | - 841        | B-115           | B-132                   | B-151 |       |
| 1.45                           | 20500                 | 2090                         | 179000        | 18200        | *           | 1.74                           | 20500                 | 2090                         | 179000      | 18200             | *             | 8 - 6235DA              | - 1003       | B-114           | B-131                   | B-150 |       |
|                                | 25800                 | 2630                         | 208000        | 21200        | *           |                                | 25800                 | 2630                         | 208000      | 21200             | *             | 8 - 6245DA              | - 1003       | B-114           | B-131                   | B-150 |       |
|                                | 32700                 | 3330                         | <b>258000</b> | <b>26300</b> | <b>1.06</b> |                                | <b>258000</b>         | <b>26300</b>                 | <b>1.27</b> | <b>8 - 6255DA</b> | <b>- 1003</b> | <b>B-115</b>            | <b>B-132</b> | <b>B-151</b>    |                         |       |       |
|                                |                       |                              | 276000        | 28100        | 1.41        |                                | 276000                | 28100                        | 1.70        | 8 - 6265DA        | - 1003        | B-115                   | B-132        | B-151           |                         |       |       |
| 1.16                           | 25800                 | 2630                         | 208000        | 21200        | *           | 1.40                           | 25800                 | 2630                         | 208000      | 21200             | *             | 8 - 6245DA              | - 1247       | B-114           | B-131                   | B-150 |       |
|                                | 40700                 | 4140                         | 258000        | 26300        | 0.85        |                                | 258000                | 26300                        | 1.02        | 8 - 6255DA        | - 1247        | B-115                   | B-132        | B-151           |                         |       |       |
| 276000                         |                       |                              | 28100         | 1.13         | 276000      | 28100                          | 1.37                  | 8 - 6265DA                   | - 1247      | B-115             | B-132         | B-151                   |              |                 |                         |       |       |
| 0.980                          | 31000                 | 3160                         | 258000        | 26300        | *           | 1.18                           | 31000                 | 3160                         | 258000      | 26300             | *             | 8 - 6255DA              | - 1479       | B-115           | B-132                   | B-151 |       |
|                                | 48200                 | 4920                         | 276000        | 28100        | 0.91        |                                | 40000                 | 4070                         | 276000      | 28100             | 1.10          | 8 - 6265DA              | - 1479       | B-115           | B-132                   | B-151 |       |
| 0.784                          | 34500                 | 3520                         | 258000        | 26300        | *           | 0.946                          | 34500                 | 3520                         | 258000      | 26300             | *             | 8 - 6255DA              | - 1849       | B-115           | B-132                   | B-151 |       |
|                                | 46000                 | 4690                         | 276000        | 28100        | *           |                                | 46000                 | 4690                         | 276000      | 28100             | *             | 8 - 6265DA              | - 1849       | B-115           | B-132                   | B-151 |       |
| 0.702                          | 46000                 | 4690                         | 276000        | 28100        | *           | 0.847                          | 46000                 | 4690                         | 276000      | 28100             | *             | 8 - 6265DA              | - 2065       | B-115           | B-132                   | B-151 |       |
| 0.572                          | 46000                 | 4690                         | 276000        | 28100        | *           | 0.690                          | 46000                 | 4690                         | 276000      | 28100             | *             | 8 - 6265DA              | - 2537       | B-115           | B-132                   | B-151 |       |
| 0.476                          | 44000                 | 4490                         | 276000        | 28100        | *           | 0.575                          | 44000                 | 4490                         | 276000      | 28100             | *             | 8 - 6265DA              | - 3045       | B-115           | B-132                   | B-151 |       |
| 0.417                          | 46000                 | 4690                         | 276000        | 28100        | *           | 0.503                          | 46000                 | 4690                         | 276000      | 28100             | *             | 8 - 6265DA              | - 3481       | B-115           | B-132                   | B-151 |       |
| 0.327                          | 44000                 | 4490                         | 276000        | 28100        | *           | 0.394                          | 44000                 | 4490                         | 276000      | 28100             | *             | 8 - 6265DA              | - 4437       | B-115           | B-132                   | B-151 |       |
| 0.282                          | 46000                 | 4690                         | 276000        | 28100        | *           | 0.341                          | 46000                 | 4690                         | 276000      | 28100             | *             | 8 - 6265DA              | - 5133       | B-115           | B-132                   | B-151 |       |
| 0.235                          | 44000                 | 4490                         | 276000        | 28100        | *           | 0.283                          | 44000                 | 4490                         | 276000      | 28100             | *             | 8 - 6265DA              | - 6177       | B-115           | B-132                   | B-151 |       |
| 0.192                          | 44000                 | 4490                         | 276000        | 28100        | *           | 0.231                          | 44000                 | 4490                         | 276000      | 28100             | *             | 8 - 6265DA              | - 7569       | B-115           | B-132                   | B-151 |       |

## Selection Tables Gearmotors

| 7.5 kW                         |                                   |                              |       |       |                                |                                   |                              |      |       | n: Motor Speed          |            |                 |      |       |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------------|-----------------------------------|------------------------------|-------|-------|--------------------------------|-----------------------------------|------------------------------|------|-------|-------------------------|------------|-----------------|------|-------|-------|-------|--|--|--|-------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------|--|--|--|--|--|
|                                |                                   |                              |       |       |                                |                                   |                              |      |       | Hz                      |            | 50Hz            |      | 60Hz  |       |       |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              |       |       |                                |                                   |                              |      |       | P                       |            | 4               | 6    | 4     | 6     |       |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              |       |       |                                |                                   |                              |      |       | n <sub>1</sub>          | r/min      | 1450            | 980  | 1750  | 1165  |       |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              |       |       |                                |                                   |                              |      |       |                         |            |                 |      |       |       |       |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 50Hz                           |                                   |                              |       |       |                                |                                   |                              |      |       | 60Hz                    |            |                 |      |       |       |       |  |  |  | Nomenclature                                                                        |  |  | Page of Dimension Sheet                                                             |  |  |                                                                                     |  |  |  |  |  |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |       | SF    | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |      | SF    | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM | CNFM  | CNVVM |       |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]   | [kgf] | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]  | [kgf] |                         |            |                 | CHHM | CHFM  | CVVM  |       |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 242                            | 282                               | 28.7                         | 5980  | 610   | 1.25                           | 292                               | 233                          | 23.8 |       |                         | 10 -       | 6130            | - 6  | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 5980  | 610   | 1.51                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 9330  | 951   | 1.73                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 9330  | 951   | 2.01                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 10400 | 1070  | 2.71                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 181                            | 375                               | 38.3                         | 6650  | 678   | 1.25                           | 219                               | 311                          | 31.7 |       |                         | 10 -       | 6130            | - 8  | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 6650  | 678   | 1.51                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 10300 | 1050  | 1.73                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 10300 | 1050  | 2.01                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 11700 | 1190  | 2.63                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 132                            | 516                               | 52.6                         | 7570  | 771   | 1.25                           | 159                               | 428                          | 43.6 |       |                         | 10 -       | 6130            | - 11 | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 7570  | 771   | 1.51                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 11600 | 1180  | 1.73                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 11600 | 1180  | 2.01                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 13200 | 1350  | 2.63                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 112                            | 610                               | 62.2                         | 7860  | 801   | 1.25                           | 135                               | 505                          | 51.5 |       |                         | 10 -       | 6130            | - 13 | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 7860  | 801   | 1.36                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 11800 | 1210  | 1.73                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 11800 | 1210  | 2.01                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 13800 | 1410  | 2.63                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 96.7                           | 704                               | 71.8                         | 8000  | 815   | 1.04                           | 117                               | 583                          | 59.5 |       |                         | 10 -       | 6130            | - 15 | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 8000  | 815   | 1.20                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 12400 | 1260  | 1.60                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 12400 | 1260  | 1.93                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 14700 | 1490  | 2.49                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 85.3                           | 798                               | 81.3                         | 8550  | 872   | 1.11                           | 103                               | 661                          | 67.4 |       |                         | 10 -       | 6135            | - 17 | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 12900 | 1320  | 1.35                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 12900 | 1320  | 1.60                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 15100 | 1540  | 1.75                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 15100 | 1540  | 2.51                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 69.0                           | 985                               | 100                          | 9050  | 923   | 0.90                           | 83.3                              | 817                          | 83.2 |       |                         | 10 -       | 6135            | - 21 | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 13800 | 1410  | 1.15                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 13800 | 1410  | 1.27                           |                                   |                              |      |       |                         |            |                 |      | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 16200 | 1650  | 1.72                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 16200 | 1650  | 2.13                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 58.0                           | 1170                              | 120                          | 14400 | 1470  | 1.05                           | 70.0                              | 972                          | 99.1 |       |                         | 10 -       | 6145            | - 25 | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 16900 | 1720  | 1.31                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 16900 | 1720  | 1.79                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 19100 | 1940  | 2.08                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 19100 | 1940  | 2.60                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 50.0                           | 1360                              | 139                          | 14700 | 1500  | 1.00                           | 60.3                              | 1130                         | 115  |       |                         | 10 -       | 6145            | - 29 | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 17600 | 1790  | 1.27                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 17600 | 1790  | 1.52                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 20100 | 2050  | 1.80                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 20100 | 2050  | 2.32                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
| 41.4                           | 1640                              | 167                          | 14500 | 1480  | 0.83                           | 50.0                              | 1360                         | 139  |       |                         | 10 -       | 6145            | - 35 | B-102 | B-118 | B-137 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 18600 | 1890  | 1.07                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 18600 | 1890  | 1.28                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 21200 | 2160  | 1.49                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 21200 | 2160  | 1.92                           |                                   |                              |      |       |                         |            |                 |      | B-103 | B-119 | B-138 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |
|                                |                                   |                              | 28600 | 2920  | 2.47                           |                                   |                              |      |       |                         | 10 -       | 6180            | - 35 | B-104 | B-120 | B-139 |  |  |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |  |  |  |

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors



7.5 kW

n: Motor Speed

| Hz             |       | 50Hz |     | 60Hz |      |
|----------------|-------|------|-----|------|------|
| P              |       | 4    | 6   | 4    | 6    |
| n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

| 50Hz                                      |                                                    |                              |        |       | 60Hz                                      |                                                    |                              |        |       | Nomenclature            |            |                   | Page of Dimension Sheet |       |       |
|-------------------------------------------|----------------------------------------------------|------------------------------|--------|-------|-------------------------------------------|----------------------------------------------------|------------------------------|--------|-------|-------------------------|------------|-------------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro |        | SF    | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro |        | SF    | Input Capacity - Symbol | Frame Size | Reduction Ratio   | CNHM                    | CNFM  | CNVM  |
|                                           |                                                    | [N]                          | [kgf]  |       |                                           |                                                    | [N]                          | [kgf]  |       |                         |            |                   | CHHM                    | CHFM  | CVVM  |
| 33.7                                      | 2020                                               | 206                          | 19700  | 2010  | 40.7                                      | 1670                                               | 170                          | 18600  | 1900  | 10 - 6165               | - 43       | 10 - 6170 - 43    | B-103                   | B-119 | B-138 |
|                                           |                                                    |                              | 22500  | 2300  |                                           |                                                    |                              | 21300  | 2170  |                         |            |                   | B-103                   | B-119 | B-138 |
|                                           |                                                    |                              | 22500  | 2300  |                                           |                                                    |                              | 21300  | 2170  |                         |            |                   | B-103                   | B-119 | B-138 |
|                                           |                                                    |                              | 30700  | 3130  |                                           |                                                    |                              | 28900  | 2950  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 30700  | 3130  |                                           |                                                    |                              | 28900  | 2950  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 42800  | 4370  |                                           |                                                    |                              | 40300  | 4110  |                         |            |                   | B-104                   | B-120 | B-139 |
| 28.4                                      | 2390                                               | 244                          | 20400  | 2080  | 34.3                                      | 1980                                               | 202                          | 19300  | 1970  | 10 - 6165               | - 51       | 10 - 6170 - 51    | B-103                   | B-119 | B-138 |
|                                           |                                                    |                              | 23400  | 2390  |                                           |                                                    |                              | 22100  | 2250  |                         |            |                   | B-103                   | B-119 | B-138 |
|                                           |                                                    |                              | 23400  | 2390  |                                           |                                                    |                              | 22100  | 2250  |                         |            |                   | B-103                   | B-119 | B-138 |
|                                           |                                                    |                              | 31700  | 3230  |                                           |                                                    |                              | 29900  | 3050  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 31700  | 3230  |                                           |                                                    |                              | 29900  | 3050  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 44800  | 4560  |                                           |                                                    |                              | 42100  | 4290  |                         |            |                   | B-104                   | B-120 | B-139 |
| 24.6                                      | 2770                                               | 282                          | 44800  | 4560  | 29.7                                      | 2290                                               | 234                          | 42100  | 4290  | 10 - 6185               | - 51       | 10 - 6190 - 51    | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 24400  | 2490  |                                           |                                                    |                              | 23100  | 2360  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 33100  | 3380  |                                           |                                                    |                              | 31200  | 3180  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 33100  | 3380  |                                           |                                                    |                              | 31200  | 3180  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 46800  | 4770  |                                           |                                                    |                              | 44000  | 4490  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 46800  | 4770  |                                           |                                                    |                              | 44000  | 4490  |                         |            |                   | B-104                   | B-120 | B-139 |
| 20.4                                      | 3330                                               | 340                          | 25700  | 2620  | 24.6                                      | 2760                                               | 281                          | 24300  | 2480  | 10 - 6175               | - 71       | 10 - 6180 - 71    | B-103                   | B-119 | B-138 |
|                                           |                                                    |                              | 35100  | 3580  |                                           |                                                    |                              | 33100  | 3380  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 35100  | 3580  |                                           |                                                    |                              | 33100  | 3380  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 49600  | 5050  |                                           |                                                    |                              | 46700  | 4760  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 49600  | 5050  |                                           |                                                    |                              | 46700  | 4760  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 49600  | 5050  |                                           |                                                    |                              | 46700  | 4760  |                         |            |                   | B-104                   | B-120 | B-139 |
| 16.7                                      | 4080                                               | 416                          | 37700  | 3840  | 20.1                                      | 3380                                               | 345                          | 35600  | 3620  | 10 - 6185               | - 87       | 10 - 6190 - 87    | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 53300  | 5430  |                                           |                                                    |                              | 50200  | 5120  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 53300  | 5430  |                                           |                                                    |                              | 50200  | 5120  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 53300  | 5430  |                                           |                                                    |                              | 50200  | 5120  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 53300  | 5430  |                                           |                                                    |                              | 50200  | 5120  |                         |            |                   | B-104                   | B-120 | B-139 |
|                                           |                                                    |                              | 53300  | 5430  |                                           |                                                    |                              | 50200  | 5120  |                         |            |                   | B-104                   | B-120 | B-139 |
| 13.9                                      | 4620                                               | 471                          | 40000  | 4080  | 16.8                                      | 3830                                               | 391                          | 37800  | 3850  | 10 - 6185DB             | - 104      | 10 - 6190DB - 104 | B-111                   | B-127 | B-146 |
|                                           |                                                    |                              | 56400  | 5750  |                                           |                                                    |                              | 53200  | 5420  |                         |            |                   | B-112                   | B-128 | B-147 |
|                                           |                                                    |                              | 56400  | 5750  |                                           |                                                    |                              | 53200  | 5420  |                         |            |                   | B-112                   | B-128 | B-147 |
|                                           |                                                    |                              | 56400  | 5750  |                                           |                                                    |                              | 53200  | 5420  |                         |            |                   | B-112                   | B-128 | B-147 |
|                                           |                                                    |                              | 56400  | 5750  |                                           |                                                    |                              | 53200  | 5420  |                         |            |                   | B-112                   | B-128 | B-147 |
|                                           |                                                    |                              | 56400  | 5750  |                                           |                                                    |                              | 53200  | 5420  |                         |            |                   | B-112                   | B-128 | B-147 |
| 12.0                                      | 4060                                               | 414                          | 41700  | 4250  | 14.5                                      | 4060                                               | 414                          | 40300  | 4100  | 10 - 6180DB             | - 121      | 10 - 6185DB - 121 | B-111                   | B-127 | B-146 |
|                                           |                                                    |                              | 41700  | 4250  |                                           |                                                    |                              | 40100  | 4090  |                         |            |                   | B-111                   | B-127 | B-146 |
|                                           |                                                    |                              | 59000  | 6010  |                                           |                                                    |                              | 56600  | 5770  |                         |            |                   | B-112                   | B-128 | B-147 |
|                                           |                                                    |                              | 59000  | 6010  |                                           |                                                    |                              | 56600  | 5770  |                         |            |                   | B-112                   | B-128 | B-147 |
|                                           |                                                    |                              | 84100  | 8570  |                                           |                                                    |                              | 84100  | 8570  |                         |            |                   | B-112                   | B-129 | B-148 |
|                                           |                                                    |                              | 104000 | 10600 |                                           |                                                    |                              | 102000 | 10400 |                         |            |                   | B-113                   | B-130 | B-149 |
| 10.1                                      | 4060                                               | 414                          | 115000 | 11700 | 12.2                                      | 4060                                               | 414                          | 109000 | 11100 | 10 - 6225DB             | - 121      | 10 - 6215DB - 121 | B-113                   | B-130 | B-149 |
|                                           |                                                    |                              | 41700  | 4250  |                                           |                                                    |                              | 41700  | 4250  |                         |            |                   | B-111                   | B-127 | B-146 |
|                                           |                                                    |                              | 41700  | 4250  |                                           |                                                    |                              | 41700  | 4250  |                         |            |                   | B-111                   | B-127 | B-146 |
|                                           |                                                    |                              | 58700  | 5980  |                                           |                                                    |                              | 58800  | 5990  |                         |            |                   | B-112                   | B-128 | B-147 |
|                                           |                                                    |                              | 58700  | 5980  |                                           |                                                    |                              | 58800  | 5990  |                         |            |                   | B-112                   | B-128 | B-147 |
|                                           |                                                    |                              | 58700  | 5980  |                                           |                                                    |                              | 58800  | 5990  |                         |            |                   | B-112                   | B-128 | B-147 |
| 8.79                                      | 4920                                               | 502                          | 41700  | 4250  | 10.6                                      | 4920                                               | 502                          | 41700  | 4250  | 10 - 6185DB             | - 165      | 10 - 6195DB - 165 | B-111                   | B-127 | B-146 |
|                                           |                                                    |                              | 58500  | 5960  |                                           |                                                    |                              | 59000  | 6010  |                         |            |                   | B-112                   | B-128 | B-147 |
|                                           |                                                    |                              | 84100  | 8570  |                                           |                                                    |                              | 84100  | 8570  |                         |            |                   | B-112                   | B-129 | B-148 |
|                                           |                                                    |                              | 104000 | 10600 |                                           |                                                    |                              | 104000 | 10600 |                         |            |                   | B-112                   | B-129 | B-148 |
|                                           |                                                    |                              | 104000 | 10600 |                                           |                                                    |                              | 104000 | 10600 |                         |            |                   | B-113                   | B-130 | B-149 |
|                                           |                                                    |                              | 124000 | 12600 |                                           |                                                    |                              | 117000 | 12000 |                         |            |                   | B-113                   | B-130 | B-149 |
| 7.5                                       | 7340                                               | 748                          | 154000 | 15700 |                                           |                                                    |                              | 146000 | 14800 | 10 - 6235DA             | - 165      | 10 - 6235DA - 165 | B-114                   | B-131 | B-150 |
|                                           |                                                    |                              | 154000 | 15700 |                                           |                                                    |                              | 146000 | 14800 |                         |            |                   | B-114                   | B-131 | B-150 |
|                                           |                                                    |                              | 154000 | 15700 |                                           |                                                    |                              | 146000 | 14800 |                         |            |                   | B-114                   | B-131 | B-150 |
|                                           |                                                    |                              | 154000 | 15700 |                                           |                                                    |                              | 146000 | 14800 |                         |            |                   | B-114                   | B-131 | B-150 |
|                                           |                                                    |                              | 154000 | 15700 |                                           |                                                    |                              | 146000 | 14800 |                         |            |                   | B-114                   | B-131 | B-150 |
|                                           |                                                    |                              | 154000 | 15700 |                                           |                                                    |                              | 146000 | 14800 |                         |            |                   | B-114                   | B-131 | B-150 |

GEARMOTORS

Selection Tables  
7.5 kW

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

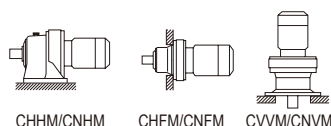


| 50Hz                           |                       |         |                              |              |             | 60Hz                           |                       |         |                              |              |             | Nomenclature               |              |                 | Page of Dimension Sheet |              |       |       |       |
|--------------------------------|-----------------------|---------|------------------------------|--------------|-------------|--------------------------------|-----------------------|---------|------------------------------|--------------|-------------|----------------------------|--------------|-----------------|-------------------------|--------------|-------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |              | SF          | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |              | SF          | Input Capacity -<br>Symbol | Frame Size - | Reduction Ratio | CNHN                    | CNFM         | CNVM  |       |       |
| [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf]        | *           | [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf]        | *           |                            |              |                 | CHHN                    | CHFM         | CHVM  |       |       |
| 7.44                           | 6380                  | 650     | 58900                        | 6000         | *           | 8.97                           | 6380                  | 650     | 58900                        | 6000         | 1.10        | 10 - 6190DB                | - 195        |                 | B-112                   | B-128        | B-147 |       |       |
|                                |                       |         | 58000                        | 5910         | 0.91        |                                |                       |         | 58600                        | 5970         | 1.10        | 10 - 6195DB                | - 195        |                 | B-112                   | B-128        | B-147 |       |       |
|                                |                       |         | <b>84100</b>                 | <b>8570</b>  | <b>1.07</b> |                                |                       |         | <b>84100</b>                 | <b>8570</b>  | <b>1.29</b> | <b>10 - 6205DB - 195</b>   |              | <b>B-112</b>    | <b>B-129</b>            | <b>B-148</b> |       |       |       |
|                                |                       |         | 104000                       | 10600        | 1.36        |                                |                       |         | 104000                       | 10600        | 1.51        | 10 - 6215DA                | - 195        |                 | B-112                   | B-129        | B-148 |       |       |
|                                | 8670                  | 884     | 104000                       | 10600        | 1.40        |                                | 7180                  | 732     | 104000                       | 10600        | 1.69        | 10 - 6215DB                | - 195        |                 | B-113                   | B-130        | B-149 |       |       |
|                                |                       |         | 130000                       | 13300        | 1.36        |                                |                       |         |                              |              | 123000      | 12600                      | 1.51         | 10 - 6225DA     | - 195                   |              | B-113 | B-130 | B-149 |
|                                |                       |         | 130000                       | 13300        | 1.67        |                                |                       |         |                              |              | 123000      | 12600                      | 2.02         | 10 - 6225DB     | - 195                   |              | B-113 | B-130 | B-149 |
|                                |                       |         | 162000                       | 16500        | 2.26        |                                |                       |         |                              |              | 153000      | 15600                      | 2.73         | 10 - 6235DA     | - 195                   |              | B-114 | B-131 | B-150 |
| 6.28                           | 6380                  | 650     | 59000                        | 6010         | *           | 7.58                           | 6380                  | 650     | 59000                        | 6010         | *           | 10 - 6190DB                | - 231        |                 | B-112                   | B-128        | B-147 |       |       |
|                                | 7960                  | 811     | 59000                        | 6010         | *           |                                |                       | 7960    | 811                          | 59000        | 6010        | *                          | 10 - 6195DB  | - 231           |                         | B-112        | B-128 | B-147 |       |
|                                |                       |         | 84100                        | 8570         | 0.90        |                                |                       |         | 84100                        | 8570         | 1.09        | 10 - 6205DB                | - 231        |                 | B-112                   | B-129        | B-148 |       |       |
|                                |                       |         | 104000                       | 10600        | 1.22        |                                |                       |         | 104000                       | 10600        | 1.47        | 10 - 6215DA                | - 231        |                 | B-112                   | B-129        | B-148 |       |       |
|                                | 10300                 | 1050    | 138000                       | 14100        | 1.44        |                                |                       |         | 131000                       | 13400        | 1.51        | 10 - 6225DA                | - 231        |                 | B-113                   | B-130        | B-149 |       |       |
|                                |                       |         | 138000                       | 14100        | 1.44        |                                |                       |         | 131000                       | 13400        | 1.74        | 10 - 6225DB                | - 231        |                 | B-113                   | B-130        | B-149 |       |       |
|                                |                       |         | 173000                       | 17600        | 1.84        |                                |                       |         | 164000                       | 16700        | 2.22        | 10 - 6235DA                | - 231        |                 | B-114                   | B-131        | B-150 |       |       |
|                                |                       |         | 192000                       | 19600        | 2.51        |                                |                       |         | 182000                       | 18600        | 3.03        | 10 - 6245DA                | - 231        |                 | B-114                   | B-131        | B-150 |       |       |
| 5.31                           | 7960                  | 811     | 59000                        | 6010         | *           | 6.41                           | 7960                  | 811     | 59000                        | 6010         | *           | 10 - 6195DB                | - 273        |                 | B-112                   | B-128        | B-147 |       |       |
|                                | 9270                  | 945     | 84100                        | 8570         | *           |                                |                       | 9270    | 945                          | 84100        | 8570        | *                          | 10 - 6205DB  | - 273           |                         | B-112        | B-129 | B-148 |       |
|                                |                       |         | <b>104000</b>                | <b>10600</b> | <b>1.03</b> |                                |                       |         | <b>104000</b>                | <b>10600</b> | <b>1.24</b> | <b>10 - 6215DA - 273</b>   |              | <b>B-112</b>    | <b>B-129</b>            | <b>B-148</b> |       |       |       |
|                                |                       |         | 145000                       | 14800        | 1.22        |                                |                       |         | 138000                       | 14000        | 1.47        | 10 - 6225DA                | - 273        |                 | B-113                   | B-130        | B-149 |       |       |
|                                | 12100                 | 1240    | 179000                       | 18200        | 1.56        |                                |                       |         | 172000                       | 17500        | 1.88        | 10 - 6235DA                | - 273        |                 | B-114                   | B-131        | B-150 |       |       |
|                                |                       |         | 202000                       | 20600        | 2.13        |                                |                       |         | 191000                       | 19500        | 2.57        | 10 - 6245DA                | - 273        |                 | B-114                   | B-131        | B-150 |       |       |
| 4.55                           |                       |         | 104000                       | 10600        | 0.89        | 5.49                           |                       |         | 104000                       | 10600        | 1.08        | 10 - 6215DA                | - 319        |                 | B-112                   | B-129        | B-148 |       |       |
|                                |                       |         | <b>145000</b>                | <b>14800</b> | <b>1.06</b> |                                |                       |         | <b>143000</b>                | <b>14600</b> | <b>1.28</b> | <b>10 - 6225DA - 319</b>   |              | <b>B-113</b>    | <b>B-130</b>            | <b>B-149</b> |       |       |       |
|                                |                       |         | 179000                       | 18200        | 1.33        |                                |                       |         | 179000                       | 18200        | 1.61        | 10 - 6235DA                | - 319        |                 | B-114                   | B-131        | B-150 |       |       |
|                                |                       |         | 208000                       | 21200        | 1.82        |                                |                       |         | 199000                       | 20300        | 2.20        | 10 - 6245DA                | - 319        |                 | B-114                   | B-131        | B-150 |       |       |
|                                |                       |         | 258000                       | 26300        | 2.29        |                                |                       |         | 245000                       | 25000        | 2.76        | 10 - 6255DA                | - 319        |                 | B-115                   | B-132        | B-151 |       |       |
|                                |                       |         |                              |              |             |                                |                       |         |                              |              |             |                            |              |                 |                         |              |       |       |       |
| 3.85                           | 12700                 | 1290    | 104000                       | 10600        | *           | 4.64                           | 12700                 | 1290    | 104000                       | 10600        | *           | 10 - 6215DA                | - 377        |                 | B-112                   | B-129        | B-148 |       |       |
|                                |                       |         | 145000                       | 14800        | 0.90        |                                |                       |         | 145000                       | 14800        | 1.08        | 10 - 6225DA                | - 377        |                 | B-113                   | B-130        | B-149 |       |       |
|                                |                       |         | 179000                       | 18200        | 1.13        |                                |                       |         | 179000                       | 18200        | 1.36        | 10 - 6235DA                | - 377        |                 | B-114                   | B-131        | B-150 |       |       |
|                                | 16800                 | 1710    | 208000                       | 21200        | 1.54        |                                |                       |         | 208000                       | 21200        | 1.86        | 10 - 6245DA                | - 377        |                 | B-114                   | B-131        | B-150 |       |       |
|                                |                       |         | 258000                       | 26300        | 1.94        |                                |                       |         | 257000                       | 26200        | 2.34        | 10 - 6255DA                | - 377        |                 | B-115                   | B-132        | B-151 |       |       |
|                                |                       |         | 276000                       | 28100        | 2.74        |                                |                       |         | 276000                       | 28100        | 3.31        | 10 - 6265DA                | - 377        |                 | B-115                   | B-132        | B-151 |       |       |
| 3.07                           | 16000                 | 1630    | 145000                       | 14800        | *           | 3.70                           | 16000                 | 1630    | 145000                       | 14800        | *           | 10 - 6225DA                | - 473        |                 | B-113                   | B-130        | B-149 |       |       |
|                                |                       |         | 179000                       | 18200        | 0.97        |                                |                       |         | 179000                       | 18200        | 1.18        | 10 - 6235DA                | - 473        |                 | B-114                   | B-131        | B-150 |       |       |
|                                | 21000                 | 2140    | 208000                       | 21200        | 1.23        |                                |                       |         | 208000                       | 21200        | 1.48        | 10 - 6245DA                | - 473        |                 | B-114                   | B-131        | B-150 |       |       |
|                                |                       |         | 258000                       | 26300        | 1.64        |                                |                       |         | 258000                       | 26300        | 1.98        | 10 - 6255DA                | - 473        |                 | B-115                   | B-132        | B-151 |       |       |
|                                |                       |         | 276000                       | 28100        | 2.19        |                                |                       |         | 276000                       | 28100        | 2.64        | 10 - 6265DA                | - 473        |                 | B-115                   | B-132        | B-151 |       |       |
|                                |                       |         |                              |              |             |                                |                       |         |                              |              |             |                            |              |                 |                         |              |       |       |       |
| 2.59                           | 16000                 | 1630    | 145000                       | 14800        | *           | 3.13                           | 16000                 | 1630    | 145000                       | 14800        | *           | 10 - 6225DA                | - 559        |                 | B-113                   | B-130        | B-149 |       |       |
|                                | 20500                 | 2090    | 179000                       | 18200        | *           |                                |                       | 20500   | 2090                         | 179000       | 18200       | *                          | 10 - 6235DA  | - 559           |                         | B-114        | B-131 | B-150 |       |
|                                |                       |         | 179000                       | 18200        | 0.82        |                                |                       |         | 179000                       | 18200        | 1.00        | 10 - 6235DA                | - 559        |                 | B-114                   | B-131        | B-150 |       |       |
|                                |                       |         | <b>208000</b>                | <b>21200</b> | <b>1.04</b> |                                |                       |         | <b>208000</b>                | <b>21200</b> | <b>1.25</b> | <b>10 - 6245DA - 559</b>   |              | <b>B-114</b>    | <b>B-131</b>            | <b>B-150</b> |       |       |       |
|                                | 24900                 | 2530    | 258000                       | 26300        | 1.39        |                                |                       |         | 258000                       | 26300        | 1.68        | 10 - 6255DA                | - 559        |                 | B-115                   | B-132        | B-151 |       |       |
|                                |                       |         | 276000                       | 28100        | 1.85        |                                |                       |         | 276000                       | 28100        | 2.23        | 10 - 6265DA                | - 559        |                 | B-115                   | B-132        | B-151 |       |       |
|                                |                       | 248000  | 25300                        | 2.74         |             |                                | 248000                | 25300   | 3.31                         | 10 - 6275DA  | - 559       |                            | B-115        | -               | B-151                   |              |       |       |       |
| 2.23                           | 20500                 | 2090    | 179000                       | 18200        | *           | 2.70                           | 20500                 | 2090    | 179000                       | 18200        | *           | 10 - 6235DA                | - 649        |                 | B-114                   | B-131        | B-150 |       |       |
|                                |                       |         | 208000                       | 21200        | 0.89        |                                |                       |         | 208000                       | 21200        | 1.08        | 10 - 6245DA                | - 649        |                 | B-114                   | B-131        | B-150 |       |       |
|                                |                       |         | 258000                       | 26300        | 1.20        |                                |                       |         | 258000                       | 26300        | 1.44        | 10 - 6255DA                | - 649        |                 | B-115                   | B-132        | B-151 |       |       |
|                                | 28900                 | 2940    | 276000                       | 28100        | 1.59        |                                |                       |         | 276000                       | 28100        | 1.92        | 10 - 6265DA                | - 649        |                 | B-115                   | B-132        | B-151 |       |       |
|                                |                       |         | 248000                       | 25300        | 2.36        |                                |                       |         | 248000                       | 25300        | 2.85        | 10 - 6275DA                | - 649        |                 | B-115                   | -            | B-151 |       |       |
| 1.98                           | 20500                 | 2090    | 179000                       | 18200        | *           | 2.39                           | 20500                 | 2090    | 179000                       | 18200        | *           | 10 - 6235DA                | - 731        |                 | B-114                   | B-131        | B-150 |       |       |
|                                | 25800                 | 2630    | 208000                       | 21200        | *           |                                |                       | 25800   | 2630                         | 208000       | 21200       | *                          | 10 - 6245DA  | - 731           |                         | B-114        | B-131 | B-150 |       |
|                                |                       |         | <b>258000</b>                | <b>26300</b> | <b>1.06</b> |                                |                       |         | <b>258000</b>                | <b>26300</b> | <b>1.28</b> | <b>10 - 6255DA - 731</b>   |              | <b>B-115</b>    | <b>B-132</b>            | <b>B-151</b> |       |       |       |
|                                | 32500                 | 3310    | 276000                       | 28100        | 1.42        |                                |                       |         | 276000                       | 28100        | 1.71        | 10 - 6265DA                | - 731        |                 | B-115                   | B-132        | B-151 |       |       |
| 248000                         |                       |         | 25300                        | 2.10         |             |                                | 248000                | 25300   | 2.53                         | 10 - 6275DA  | - 731       |                            | B-115        | -               | B-151                   |              |       |       |       |

- B-74 Gearmotors / Selection Tables



## Selection Tables Gearmotors

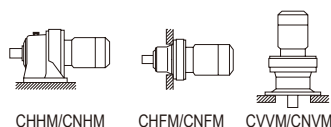


| 7.5 kW | Hz             |       | 50Hz |     | 60Hz |      |
|--------|----------------|-------|------|-----|------|------|
|        | P              |       | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

| 50Hz                           |                       |                              |               |              |             | 60Hz                           |                       |                              |               | Nomenclature            |             |                           | Page of Dimension Sheet |              |              |
|--------------------------------|-----------------------|------------------------------|---------------|--------------|-------------|--------------------------------|-----------------------|------------------------------|---------------|-------------------------|-------------|---------------------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro |               | SF           |             | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro |               | Input Capacity - Symbol | Frame Size  | Reduction Ratio           | CNHM                    | CNFM         | CNVM         |
| [r/min]                        | [N·m]                 | [kgf·m]                      | [N]           | [kgf]        |             | [r/min]                        | [N·m]                 | [kgf·m]                      | [N]           |                         |             |                           |                         |              |              |
| 1.72                           | 25800                 | 2630                         | 208000        | 21200        | *           | 2.08                           | 25800                 | 2630                         | 208000        | 21200                   | *           | 10 - 6245DA - 841         | B-114                   | B-131        | B-150        |
|                                |                       |                              | 258000        | 26300        | 0.87        |                                |                       |                              | 258000        | 26300                   | 1.05        | 10 - 6255DA - 841         | B-115                   | B-132        | B-151        |
|                                | 37400                 | 3810                         | 276000        | 28100        | 1.23        |                                | 31000                 | 3160                         | 276000        | 28100                   | 1.48        | 10 - 6265DA - 841         | B-115                   | B-132        | B-151        |
|                                |                       |                              | 248000        | 25300        | 1.82        |                                |                       |                              | 248000        | 25300                   | 2.20        | 10 - 6275DA - 841         | B-115                   | -            | B-151        |
| 1.45                           | 34500                 | 3520                         | 258000        | 26300        | *           | 1.74                           | 34500                 | 3520                         | 258000        | 26300                   | *           | 10 - 6255DA - 1003        | B-115                   | B-132        | B-151        |
|                                | 44600                 | 4550                         | <b>276000</b> | <b>28100</b> | <b>1.03</b> |                                | 36900                 | 3770                         | <b>276000</b> | <b>28100</b>            | <b>1.25</b> | <b>10 - 6265DA - 1003</b> | <b>B-115</b>            | <b>B-132</b> | <b>B-151</b> |
|                                |                       |                              | 248000        | 25300        | 1.53        |                                |                       |                              | 248000        | 25300                   | 1.85        | 10 - 6275DA - 1003        | B-115                   | -            | B-151        |
|                                |                       |                              |               |              |             |                                |                       |                              |               |                         |             |                           |                         |              |              |
| 1.16                           | 34500                 | 3520                         | 258000        | 26300        | *           | 1.40                           | 34500                 | 3520                         | 258000        | 26300                   | *           | 10 - 6255DA - 1247        | B-115                   | B-132        | B-151        |
|                                | 46000                 | 4690                         | 276000        | 28100        | *           |                                | 46000                 | 4690                         | 276000        | 28100                   | *           | 10 - 6265DA - 1247        | B-115                   | B-132        | B-151        |
|                                |                       |                              | 276000        | 28100        | 0.83        |                                |                       |                              | 276000        | 28100                   | 1.00        | 10 - 6265DA - 1247        | B-115                   | B-132        | B-151        |
|                                | 55400                 | 5650                         | 248000        | 25300        | 1.23        |                                | 45900                 | 4680                         | 248000        | 25300                   | 1.48        | 10 - 6275DA - 1247        | B-115                   | -            | B-151        |
| 0.980                          | 44000                 | 4490                         | 276000        | 28100        | *           | 1.18                           | 44000                 | 4490                         | 276000        | 28100                   | *           | 10 - 6265DA - 1479        | B-115                   | B-132        | B-151        |
|                                | 65800                 | 6700                         | <b>247000</b> | <b>25200</b> | <b>1.04</b> |                                | <b>54500</b>          | <b>5550</b>                  | <b>248000</b> | <b>25300</b>            | <b>1.25</b> | <b>10 - 6275DA - 1479</b> | <b>B-115</b>            | -            | <b>B-151</b> |
| 0.784                          | 82200                 | 8380                         | 248000        | 25300        | 0.83        | 0.946                          | 68100                 | 6940                         | 248000        | 25300                   | 1.00        | 10 - 6275DA - 1849        | B-115                   | -            | B-151        |
| 0.702                          | 68200                 | 6950                         | 248000        | 25300        | *           | 0.847                          | 68200                 | 6950                         | 248000        | 25300                   | *           | 10 - 6275DA - 2065        | B-115                   | -            | B-151        |
| 0.572                          | 68200                 | 6950                         | 248000        | 25300        | *           | 0.690                          | 68200                 | 6950                         | 248000        | 25300                   | *           | 10 - 6275DA - 2537        | B-115                   | -            | B-151        |
| 0.476                          | 68200                 | 6950                         | 245000        | 25000        | *           | 0.575                          | 68200                 | 6950                         | 245000        | 25000                   | *           | 10 - 6275DA - 3045        | B-115                   | -            | B-151        |
| 0.417                          | 68200                 | 6950                         | 248000        | 25300        | *           | 0.503                          | 68200                 | 6950                         | 248000        | 25300                   | *           | 10 - 6275DA - 3481        | B-115                   | -            | B-151        |
| 0.327                          | 68200                 | 6950                         | 245000        | 25000        | *           | 0.394                          | 68200                 | 6950                         | 245000        | 25000                   | *           | 10 - 6275DA - 4437        | B-115                   | -            | B-151        |
| 0.282                          | 68200                 | 6950                         | 245000        | 25000        | *           | 0.341                          | 68200                 | 6950                         | 245000        | 25000                   | *           | 10 - 6275DA - 5133        | B-115                   | -            | B-151        |
| 0.235                          | 68200                 | 6950                         | 245000        | 25000        | *           | 0.283                          | 68200                 | 6950                         | 245000        | 25000                   | *           | 10 - 6275DA - 6177        | B-115                   | -            | B-151        |
| 0.192                          | 68200                 | 6950                         | 245000        | 25000        | *           | 0.231                          | 68200                 | 6950                         | 245000        | 25000                   | *           | 10 - 6275DA - 7569        | B-115                   | -            | B-151        |

GEARMOTORS

Selection Tables  
7.5 kW, 11 kW

| 11 kW | Hz             |       | 50Hz |     | 60Hz |      |
|-------|----------------|-------|------|-----|------|------|
|       | P              |       | 4    | 6   | 4    | 6    |
|       | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

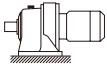
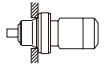
n: Motor Speed

| 50Hz                           |                       |                              |             |            |             | 60Hz                           |                       |                              |             | Nomenclature            |             |                      | Page of Dimension Sheet |              |              |
|--------------------------------|-----------------------|------------------------------|-------------|------------|-------------|--------------------------------|-----------------------|------------------------------|-------------|-------------------------|-------------|----------------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro |             | SF         |             | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro |             | Input Capacity - Symbol | Frame Size  | Reduction Ratio      | CNHM                    | CNFM         | CNVM         |
| [r/min]                        | [N·m]                 | [kgf·m]                      | [N]         | [kgf]      |             | [r/min]                        | [N·m]                 | [kgf·m]                      | [N]         |                         |             |                      |                         |              |              |
| 242                            | 413                   | 42.1                         | <b>5840</b> | <b>595</b> | <b>1.03</b> | 292                            | 342                   | 34.9                         | <b>5540</b> | <b>564</b>              | <b>1.03</b> | <b>15 - 6135 - 6</b> | <b>B-102</b>            | <b>B-118</b> | <b>B-137</b> |
|                                |                       |                              | 9270        | 945        | 1.18        |                                |                       |                              | 8780        | 895                     | 1.18        | 15 - 6140 - 6        | B-102                   | B-118        | B-137        |
|                                |                       |                              | 9270        | 945        | 1.37        |                                |                       |                              | 8780        | 895                     | 1.37        | 15 - 6145 - 6        | B-102                   | B-118        | B-137        |
|                                |                       |                              | 10400       | 1060       | 1.85        |                                |                       |                              | 9760        | 995                     | 1.85        | 15 - 6160 - 6        | B-103                   | B-119        | B-138        |
|                                |                       |                              | 10400       | 1060       | 2.19        |                                |                       |                              | 9760        | 995                     | 2.19        | 15 - 6165 - 6        | B-103                   | B-119        | B-138        |
|                                |                       |                              | 11700       | 1190       | 2.51        |                                |                       |                              | 11000       | 1120                    | 2.51        | 15 - 6170 - 6        | B-103                   | B-119        | B-138        |
|                                |                       |                              | 11700       | 1190       | 2.74        |                                |                       |                              | 11000       | 1120                    | 2.74        | 15 - 6175 - 6        | B-103                   | B-119        | B-138        |
|                                |                       |                              |             |            |             |                                |                       |                              |             |                         |             |                      |                         |              |              |
| 181                            | 551                   | 56.1                         | <b>6480</b> | <b>661</b> | <b>1.03</b> | 219                            | 456                   | 46.5                         | <b>6150</b> | <b>627</b>              | <b>1.03</b> | <b>15 - 6135 - 8</b> | <b>B-102</b>            | <b>B-118</b> | <b>B-137</b> |
|                                |                       |                              | 10300       | 1050       | 1.18        |                                |                       |                              | 9730        | 992                     | 1.18        | 15 - 6140 - 8        | B-102                   | B-118        | B-137        |
|                                |                       |                              | 10300       | 1050       | 1.37        |                                |                       |                              | 9730        | 992                     | 1.37        | 15 - 6145 - 8        | B-102                   | B-118        | B-137        |
|                                |                       |                              | 11600       | 1180       | 1.79        |                                |                       |                              | 10900       | 1110                    | 1.79        | 15 - 6160 - 8        | B-103                   | B-119        | B-138        |
|                                |                       |                              | 11600       | 1180       | 2.19        |                                |                       |                              | 10900       | 1110                    | 2.19        | 15 - 6165 - 8        | B-103                   | B-119        | B-138        |
|                                |                       |                              | 12900       | 1320       | 2.51        |                                |                       |                              | 12200       | 1240                    | 2.51        | 15 - 6170 - 8        | B-103                   | B-119        | B-138        |
|                                |                       |                              | 12900       | 1320       | 2.74        |                                |                       |                              | 12200       | 1240                    | 2.74        | 15 - 6175 - 8        | B-103                   | B-119        | B-138        |
|                                |                       |                              |             |            |             |                                |                       |                              |             |                         |             |                      |                         |              |              |

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

## Selection Tables Gearmotors

| 11 kW |  | n <sub>1</sub> : Motor Speed |  |      |  |      |  |           |  |  |
|-------|--|------------------------------|--|------|--|------|--|-----------|--|--|
|       |  | Hz                           |  | 50Hz |  | 60Hz |  |           |  |  |
|       |  | P                            |  | 4    |  | 6    |  |           |  |  |
|       |  | n <sub>1</sub> r/min         |  | 1450 |  | 980  |  | 1750 1165 |  |  |

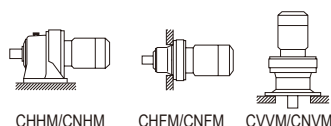




CHHM/CNHM
CHFM/CNFM
CVVM/CNVVM

| 50Hz                                      |                                        |                                           |      |      | 60Hz                                      |                                        |                                           |      |      | Nomenclature            |            |                 | Page of Dimension Sheet |              |              |
|-------------------------------------------|----------------------------------------|-------------------------------------------|------|------|-------------------------------------------|----------------------------------------|-------------------------------------------|------|------|-------------------------|------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF   |      | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF   |      | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM         | CNVVM        |
| 132                                       | 757                                    | 77.2                                      | 1.03 | 1.18 | 159                                       | 627                                    | 63.9                                      | 1.03 | 1.18 | 15 - 6135               | - 11       | - 11            | <b>B-102</b>            | <b>B-118</b> | <b>B-137</b> |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-102                   | B-118        | B-137        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-102                   | B-118        | B-137        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
| 112                                       | 895                                    | 91.2                                      | 1.18 | 1.37 | 135                                       | 741                                    | 75.6                                      | 1.18 | 1.37 | 15 - 6140               | - 13       | - 13            | <b>B-102</b>            | <b>B-118</b> | <b>B-137</b> |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-102                   | B-118        | B-137        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
| 96.7                                      | 1030                                   | 105                                       | 1.09 | 1.32 | 117                                       | 855                                    | 87.2                                      | 1.09 | 1.32 | 15 - 6140               | - 15       | - 15            | <b>B-102</b>            | <b>B-118</b> | <b>B-137</b> |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-102                   | B-118        | B-137        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
| 85.3                                      | 1170                                   | 119                                       | 1.09 | 1.19 | 103                                       | 969                                    | 98.8                                      | 1.09 | 1.19 | 15 - 6145               | - 17       | - 17            | <b>B-102</b>            | <b>B-118</b> | <b>B-137</b> |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
| 69.0                                      | 1450                                   | 147                                       | 1.17 | 1.45 | 83.3                                      | 1200                                   | 122                                       | 1.17 | 1.46 | 15 - 6160               | - 21       | - 21            | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
| 58.0                                      | 1720                                   | 175                                       | 1.22 | 1.42 | 70.0                                      | 1430                                   | 145                                       | 1.22 | 1.44 | 15 - 6165               | - 25       | - 25            | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
| 50.0                                      | 2000                                   | 203                                       | 1.04 | 1.23 | 60.3                                      | 1650                                   | 169                                       | 1.04 | 1.30 | 15 - 6165               | - 29       | - 29            | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
| 41.4                                      | 2410                                   | 246                                       | 1.02 | 1.31 | 50.0                                      | 2000                                   | 203                                       | 1.02 | 1.37 | 15 - 6170               | - 35       | - 35            | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-103                   | B-119        | B-138        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
| 33.7                                      | 2960                                   | 302                                       | 1.03 | 1.37 | 40.7                                      | 2450                                   | 250                                       | 1.03 | 1.37 | 15 - 6175               | - 43       | - 43            | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-104                   | B-120        | B-139        |
|                                           |                                        |                                           |      |      |                                           |                                        |                                           |      |      |                         |            |                 | B-105                   | B-121        | B-140        |

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors

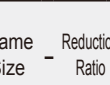
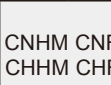


|       |                |       |      |     |      |      |
|-------|----------------|-------|------|-----|------|------|
| 11 kW | Hz             |       | 50Hz |     | 60Hz |      |
|       | P              |       | 4    | 6   | 4    | 6    |
|       | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

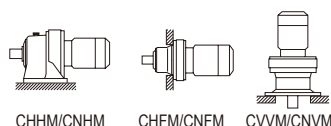
| 50Hz                                      |                                                    |                                           |      |      | 60Hz                                      |                                                    |                                           |      |      | Nomenclature            |            |                 | Page of Dimension Sheet |              |              |
|-------------------------------------------|----------------------------------------------------|-------------------------------------------|------|------|-------------------------------------------|----------------------------------------------------|-------------------------------------------|------|------|-------------------------|------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF   |      | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF   |      | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM         | CNVVM        |
| 28.4                                      | 3510                                               | 358                                       | 1.09 | 1.09 | 34.3                                      | 2910                                               | 296                                       | 1.03 | 1.03 | 15 - 6175               | - 51       | - 51            | B-103                   | B-119        | B-138        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6180               | - 51       | - 51            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6185               | - 51       | - 51            | B-104                   | B-120        | B-139        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6190               | - 51       | - 51            | B-104                   | B-120        | B-139        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6195               | - 51       | - 51            | B-104                   | B-120        | B-139        |
| 24.6                                      | 4060                                               | 414                                       | 1.09 | 1.09 | 29.7                                      | 3360                                               | 343                                       | 1.09 | 1.09 | 15 - 6185               | - 59       | - 59            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6190               | - 59       | - 59            | B-104                   | B-120        | B-139        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6195               | - 59       | - 59            | B-104                   | B-120        | B-139        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6205               | - 59       | - 59            | B-105                   | B-121        | B-140        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6215               | - 59       | - 59            | B-106                   | B-121        | B-140        |
| 20.4                                      | 4890                                               | 498                                       | 1.23 | 1.23 | 24.6                                      | 4050                                               | 413                                       | 1.23 | 1.23 | 15 - 6185               | - 71       | - 71            | B-104                   | B-120        | B-139        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6190               | - 71       | - 71            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6195               | - 71       | - 71            | B-104                   | B-120        | B-139        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6205               | - 71       | - 71            | B-105                   | B-121        | B-140        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6215               | - 71       | - 71            | B-106                   | B-121        | B-140        |
| 16.7                                      | 5990                                               | 610                                       | 1.06 | 1.06 | 20.1                                      | 4960                                               | 506                                       | 1.07 | 1.07 | 15 - 6190               | - 87       | - 87            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6195               | - 87       | - 87            | B-104                   | B-120        | B-139        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6205               | - 87       | - 87            | B-105                   | B-121        | B-140        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6215               | - 87       | - 87            | B-106                   | B-121        | B-140        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6225               | - 87       | - 87            | B-107                   | B-122        | B-141        |
| 13.9                                      | 4060                                               | 414                                       | 1.03 | 1.03 | 16.8                                      | 4900                                               | 500                                       | 1.03 | 1.03 | 15 - 6180DB             | - 104      | - 104           | B-111                   | B-127        | B-146        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6185DB             | - 104      | - 104           | B-111                   | B-127        | B-146        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6190DB             | - 104      | - 104           | B-112                   | B-128        | B-147        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6195DB             | - 104      | - 104           | B-113                   | B-129        | B-148        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6200DB             | - 104      | - 104           | B-114                   | B-130        | B-149        |
| 12.0                                      | 7890                                               | 804                                       | 1.03 | 1.03 | 14.5                                      | 6540                                               | 666                                       | 1.03 | 1.03 | 15 - 6185DB             | - 121      | - 121           | B-111                   | B-127        | B-146        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6190DB             | - 121      | - 121           | B-112                   | B-128        | B-147        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6195DB             | - 121      | - 121           | B-113                   | B-129        | B-148        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6200DB             | - 121      | - 121           | B-114                   | B-130        | B-149        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6205DB             | - 121      | - 121           | B-115                   | B-131        | B-150        |
| 10.1                                      | 6380                                               | 650                                       | 1.03 | 1.03 | 12.2                                      | 7630                                               | 778                                       | 1.03 | 1.03 | 15 - 6180DB             | - 143      | - 143           | B-111                   | B-127        | B-146        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6185DB             | - 143      | - 143           | B-112                   | B-128        | B-147        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6190DB             | - 143      | - 143           | B-113                   | B-129        | B-148        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6195DB             | - 143      | - 143           | B-114                   | B-130        | B-149        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6200DB             | - 143      | - 143           | B-115                   | B-131        | B-150        |
| 8.79                                      | 10800                                              | 1100                                      | 1.03 | 1.03 | 10.6                                      | 8910                                               | 909                                       | 1.03 | 1.03 | 15 - 6185DB             | - 165      | - 165           | B-111                   | B-127        | B-146        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6190DB             | - 165      | - 165           | B-112                   | B-128        | B-147        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6195DB             | - 165      | - 165           | B-113                   | B-129        | B-148        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6200DB             | - 165      | - 165           | B-114                   | B-130        | B-149        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6205DB             | - 165      | - 165           | B-115                   | B-131        | B-150        |
| 7.44                                      | 12700                                              | 1300                                      | 1.03 | 1.03 | 8.97                                      | 10500                                              | 1070                                      | 1.03 | 1.03 | 15 - 6180DB             | - 195      | - 195           | B-111                   | B-127        | B-146        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6185DB             | - 195      | - 195           | B-112                   | B-128        | B-147        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6190DB             | - 195      | - 195           | B-113                   | B-129        | B-148        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6195DB             | - 195      | - 195           | B-114                   | B-130        | B-149        |
|                                           |                                                    |                                           |      |      |                                           |                                                    |                                           |      |      | 15 - 6200DB             | - 195      | - 195           | B-115                   | B-131        | B-150        |

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

| 11 kW                          |                                   | n <sub>1</sub> : Motor Speed |        |       |                                |    |                              |        |       |                         |            |                 |                         |       |       |
|--------------------------------|-----------------------------------|------------------------------|--------|-------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|--------|-------|-------------------------|------------|-----------------|-------------------------|-------|-------|
|                                |                                   | Hz                           |        | 50Hz  |                                | 60Hz                                                                                                                                                                                                                                                        |                              |        |       |                         |            |                 |                         |       |       |
|                                |                                   | P                            |        | 4     | 6                              | 4                                                                                                                                                                                                                                                           | 6                            |        |       |                         |            |                 |                         |       |       |
|                                |                                   | n <sub>1</sub>               | r/min  | 1450  | 980                            | 1750                                                                                                                                                                                                                                                        | 1165                         |        |       |                         |            |                 |                         |       |       |
| 50Hz                           |                                   |                              |        |       |                                | 60Hz                                                                                                                                                                                                                                                        |                              |        |       | Nomenclature            |            |                 | Page of Dimension Sheet |       |       |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub>                                                                                                                                                                                                                           | Allowable Radial Load<br>Pro |        | SF    | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVVM |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    |       | [r/min]                        | [N·m]                                                                                                                                                                                                                                                       | [kgf·m]                      | [N]    |       |                         |            |                 | CHHM                    | CHFM  | CVVM  |
| 6.28                           | 9270                              | 945                          | 84100  | 8570  | 7.58                           | 9270                                                                                                                                                                                                                                                        | 945                          | 84100  | 8570  | 15 -                    | 6205DB     | - 231           | B-112                   | B-129 | B-144 |
|                                | 12500                             | 1270                         | 104000 | 10600 |                                | 12500                                                                                                                                                                                                                                                       | 1270                         | 104000 | 10600 | 15 -                    | 6215DA     | - 231           | B-112                   | B-130 | B-148 |
|                                |                                   |                              | 104000 | 10600 |                                |                                                                                                                                                                                                                                                             |                              | 104000 | 10600 | 15 -                    | 6215DA     | - 231           | B-112                   | B-130 | B-148 |
|                                |                                   |                              | 137000 | 14000 |                                |                                                                                                                                                                                                                                                             |                              | 130000 | 13300 | 15 -                    | 6225DA     | - 231           | B-113                   | B-130 | B-149 |
|                                | 15100                             | 1540                         | 137000 | 14000 |                                |                                                                                                                                                                                                                                                             |                              | 130000 | 13300 | 15 -                    | 6225DB     | - 231           | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 172000 | 17500 |                                | 12500                                                                                                                                                                                                                                                       | 1270                         | 163000 | 16600 | 15 -                    | 6235DA     | - 231           | B-114                   | B-131 | B-150 |
|                                |                                   |                              | 191000 | 19500 |                                |                                                                                                                                                                                                                                                             |                              | 181000 | 18500 | 15 -                    | 6245DA     | - 231           | B-114                   | B-131 | B-150 |
|                                |                                   |                              | 233000 | 23800 |                                |                                                                                                                                                                                                                                                             |                              | 221000 | 22500 | 15 -                    | 6255DA     | - 231           | B-115                   | B-132 | B-151 |
| 5.31                           | 12500                             | 1270                         | 104000 | 10600 | 6.41                           | 12500                                                                                                                                                                                                                                                       | 1270                         | 104000 | 10600 | 15 -                    | 6215DA     | - 273           | B-112                   | B-130 | B-148 |
|                                | 14800                             | 1510                         | 145000 | 14700 |                                | 14800                                                                                                                                                                                                                                                       | 1510                         | 137000 | 13900 | 15 -                    | 6225DA     | - 273           | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 144000 | 14700 |                                |                                                                                                                                                                                                                                                             |                              | 137000 | 13900 | 15 -                    | 6225DA     | - 273           | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 179000 | 18200 |                                |                                                                                                                                                                                                                                                             |                              | 171000 | 17400 | 15 -                    | 6235DA     | - 273           | B-114                   | B-131 | B-150 |
|                                | 17800                             | 1810                         | 201000 | 20500 |                                | 14700                                                                                                                                                                                                                                                       | 1500                         | 190000 | 19400 | 15 -                    | 6245DA     | - 273           | B-114                   | B-131 | B-150 |
|                                |                                   |                              | 245000 | 25000 |                                |                                                                                                                                                                                                                                                             |                              | 232000 | 23600 | 15 -                    | 6255DA     | - 273           | B-115                   | B-132 | B-151 |
| 4.55                           | 12700                             | 1290                         | 104000 | 10600 | 5.49                           | 12700                                                                                                                                                                                                                                                       | 1290                         | 104000 | 10600 | 15 -                    | 6215DA     | - 319           | B-112                   | B-130 | B-148 |
|                                | 15000                             | 1530                         | 145000 | 14800 |                                | 15000                                                                                                                                                                                                                                                       | 1530                         | 142000 | 14500 | 15 -                    | 6225DA     | - 319           | B-113                   | B-130 | B-149 |
|                                |                                   |                              | 179000 | 18200 |                                |                                                                                                                                                                                                                                                             |                              | 177000 | 18100 | 15 -                    | 6235DA     | - 319           | B-114                   | B-131 | B-150 |
|                                |                                   |                              | 208000 | 21200 |                                | 17200                                                                                                                                                                                                                                                       | 1760                         | 198000 | 20200 | 15 -                    | 6245DA     | - 319           | B-114                   | B-131 | B-150 |
|                                | 20800                             | 2120                         | 258000 | 26300 |                                |                                                                                                                                                                                                                                                             |                              | 244000 | 24900 | 15 -                    | 6255DA     | - 319           | B-115                   | B-132 | B-151 |
|                                |                                   |                              | 276000 | 28100 |                                |                                                                                                                                                                                                                                                             |                              | 276000 | 28100 | 15 -                    | 6265DA     | - 319           | B-115                   | B-132 | B-151 |
| 3.85                           | 15000                             | 1530                         | 145000 | 14800 | 4.64                           | 15000                                                                                                                                                                                                                                                       | 1530                         | 145000 | 14800 | 15 -                    | 6225DA     |                 |                         |       |       |

- B-78 Gearmotors / Selection Tables

## Selection Tables Gearmotors



|       |                |       |      |     |      |      |
|-------|----------------|-------|------|-----|------|------|
| 15 kW | Hz             |       | 50Hz |     | 60Hz |      |
|       | P              |       | 4    | 6   | 4    | 6    |
|       | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

| 50Hz                           |                       |         |                              |       |      | 60Hz                           |                       |         |                              |       |       | Nomenclature               |            |                 | Page of Dimension Sheet |       |       |       |       |       |
|--------------------------------|-----------------------|---------|------------------------------|-------|------|--------------------------------|-----------------------|---------|------------------------------|-------|-------|----------------------------|------------|-----------------|-------------------------|-------|-------|-------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF    | Input Capacity -<br>Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVN  |       |       |       |
| [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      | [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |       |                            |            |                 | CHHM                    | CHFM  | CVVM  |       |       |       |
| 242                            | 563                   | 57.4    | 9200                         | 938   | 1.01 | 292                            | 467                   | 47.6    | 8730                         | 889   | 1.01  | 20 -                       | 6145       | - 6             | B-102                   | B-118 | B-137 |       |       |       |
|                                |                       |         | 10200                        | 1040  | 1.35 |                                |                       |         | 9670                         | 986   | 1.35  | 20 -                       | 6160       | - 6             | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 10200                        | 1040  | 1.61 |                                |                       |         | 9670                         | 986   | 1.61  | 20 -                       | 6165       | - 6             | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 11600                        | 1180  | 1.84 |                                |                       |         | 10900                        | 1110  | 1.84  | 20 -                       | 6170       | - 6             | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 11600                        | 1180  | 2.01 |                                |                       |         | 10900                        | 1110  | 2.01  | 20 -                       | 6175       | - 6             | B-103                   | B-119 | B-138 |       |       |       |
| 181                            | 751                   | 76.5    | 10200                        | 1040  | 1.01 | 219                            | 622                   | 63.4    | 9660                         | 984   | 1.01  | 20 -                       | 6145       | - 8             | B-102                   | B-118 | B-137 |       |       |       |
|                                |                       |         | 11400                        | 1170  | 1.31 |                                |                       |         | 10800                        | 1100  | 1.31  | 20 -                       | 6160       | - 8             | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 11400                        | 1170  | 1.61 |                                |                       |         | 10800                        | 1100  | 1.61  | 20 -                       | 6165       | - 8             | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 12800                        | 1310  | 1.84 |                                |                       |         | 12100                        | 1230  | 1.84  | 20 -                       | 6170       | - 8             | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 12800                        | 1310  | 2.01 |                                |                       |         | 12100                        | 1230  | 2.01  | 20 -                       | 6175       | - 8             | B-103                   | B-119 | B-138 |       |       |       |
| 132                            | 1030                  | 105     | 11400                        | 1160  | 1.01 | 159                            | 855                   | 87.2    | 10800                        | 1100  | 1.01  | 20 -                       | 6145       | - 11            | B-102                   | B-118 | B-137 |       |       |       |
|                                |                       |         | 12900                        | 1320  | 1.31 |                                |                       |         | 12200                        | 1240  | 1.31  | 20 -                       | 6160       | - 11            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 12900                        | 1320  | 1.61 |                                |                       |         | 12200                        | 1240  | 1.61  | 20 -                       | 6165       | - 11            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 14700                        | 1500  | 1.84 |                                |                       |         | 13900                        | 1420  | 1.84  | 20 -                       | 6170       | - 11            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 14700                        | 1500  | 2.01 |                                |                       |         | 13900                        | 1420  | 2.01  | 20 -                       | 6175       | - 11            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 19600                        | 2000  | 2.35 |                                |                       |         | 18500                        | 1880  | 2.35  | 20 -                       | 6180       | - 11            | B-104                   | B-120 | B-139 |       |       |       |
|                                |                       |         | 19600                        | 2000  | 2.60 |                                |                       |         | 18500                        | 1880  | 2.60  | 20 -                       | 6185       | - 11            | B-104                   | B-120 | B-139 |       |       |       |
|                                |                       |         | 27500                        | 2800  | 2.73 |                                |                       |         | 25800                        | 2630  | 2.73  | 20 -                       | 6190       | - 11            | B-104                   | B-120 | B-139 |       |       |       |
| 112                            | 1220                  | 124     | 11600                        | 1190  | 1.01 | 135                            | 1010                  | 103     | 11000                        | 1130  | 1.01  | 20 -                       | 6145       | - 13            | B-102                   | B-118 | B-137 |       |       |       |
|                                |                       |         | 13500                        | 1370  | 1.31 |                                |                       |         | 12700                        | 1300  | 1.31  | 20 -                       | 6160       | - 13            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 13500                        | 1370  | 1.51 |                                |                       |         | 12700                        | 1300  | 1.51  | 20 -                       | 6165       | - 13            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 15300                        | 1560  | 1.82 |                                |                       |         | 14500                        | 1470  | 1.82  | 20 -                       | 6170       | - 13            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 15300                        | 1560  | 2.01 |                                |                       |         | 14500                        | 1470  | 2.01  | 20 -                       | 6175       | - 13            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 20400                        | 2080  | 2.35 |                                |                       |         | 19200                        | 1960  | 2.35  | 20 -                       | 6180       | - 13            | B-104                   | B-120 | B-139 |       |       |       |
|                                |                       |         | 20400                        | 2080  | 2.60 |                                |                       |         | 19200                        | 1960  | 2.60  | 20 -                       | 6185       | - 13            | B-104                   | B-120 | B-139 |       |       |       |
|                                |                       |         | 28600                        | 2910  | 2.73 |                                |                       |         | 26900                        | 2740  | 2.73  | 20 -                       | 6190       | - 13            | B-104                   | B-120 | B-139 |       |       |       |
| 96.7                           | 1410                  | 144     | 12100                        | 1240  | 0.97 | 117                            | 1170                  | 119     | 11500                        | 1170  | 1.01  | 20 -                       | 6145       | - 15            | B-102                   | B-118 | B-137 |       |       |       |
|                                |                       |         | 14200                        | 1450  | 1.25 |                                |                       |         | 13500                        | 1370  | 1.25  | 20 -                       | 6160       | - 15            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 14200                        | 1450  | 1.49 |                                |                       |         | 13500                        | 1370  | 1.51  | 20 -                       | 6165       | - 15            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 16100                        | 1640  | 1.70 |                                |                       |         | 15200                        | 1550  | 1.70  | 20 -                       | 6170       | - 15            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 16100                        | 1640  | 2.01 |                                |                       |         | 15200                        | 1550  | 2.01  | 20 -                       | 6175       | - 15            | B-103                   | B-119 | B-138 |       |       |       |
|                                |                       |         | 21600                        | 2200  | 2.16 |                                |                       |         | 20300                        | 2070  | 2.16  | 20 -                       | 6180       | - 15            | B-104                   | B-120 | B-139 |       |       |       |
|                                |                       |         | 21600                        | 2200  | 2.60 |                                |                       |         | 20300                        | 2070  | 2.60  | 20 -                       | 6185       | - 15            | B-104                   | B-120 | B-139 |       |       |       |
| 85.3                           | 1600                  | 163     | 30000                        | 3060  | 2.73 | 103                            | 1320                  | 135     | 28200                        | 2880  | 2.73  | 20 -                       | 6190       | - 15            | B-104                   | B-120 | B-139 |       |       |       |
|                                |                       |         | 12600                        | 1290  | 0.80 |                                |                       |         | 83.3                         | 1630  | 166   | 12000                      | 1220       | 0.80            | 20 -                    | 6145  | - 17  | B-102 | B-118 | B-137 |
|                                |                       |         | 14600                        | 1490  | 1.25 |                                |                       |         |                              |       |       | 13900                      | 1410       | 1.25            | 20 -                    | 6165  | - 17  | B-103 | B-119 | B-138 |
|                                |                       |         | 16700                        | 1700  | 1.31 |                                |                       |         |                              |       |       | 15800                      | 1610       | 1.31            | 20 -                    | 6170  | - 17  | B-103 | B-119 | B-138 |
|                                |                       |         | 16700                        | 1700  | 1.61 |                                |                       |         |                              |       |       | 15800                      | 1610       | 1.61            | 20 -                    | 6175  | - 17  | B-103 | B-119 | B-138 |
|                                |                       |         | 22700                        | 2320  | 2.04 |                                |                       |         |                              |       |       | 21400                      | 2180       | 2.04            | 20 -                    | 6180  | - 17  | B-104 | B-120 | B-139 |
|                                |                       |         | 22700                        | 2320  | 2.55 |                                |                       |         |                              |       |       | 21400                      | 2180       | 2.60            | 20 -                    | 6185  | - 17  | B-104 | B-120 | B-139 |
| 69.0                           | 1970                  | 201     | 31600                        | 3220  | 2.73 | 70.0                           | 1940                  | 198     | 29800                        | 3030  | 2.73  | 20 -                       | 6190       | - 17            | B-104                   | B-120 | B-139 |       |       |       |
|                                |                       |         | 15600                        | 1590  | 1.07 |                                |                       |         | 58.0                         | 2350  | 239   | 14800                      | 1510       | 1.07            | 20 -                    | 6165  | - 21  | B-103 | B-119 | B-138 |
|                                |                       |         | 17900                        | 1830  | 1.24 |                                |                       |         |                              |       |       | 17000                      | 1730       | 1.30            | 20 -                    | 6170  | - 21  | B-103 | B-119 | B-138 |
|                                |                       |         | 17900                        | 1830  | 1.57 |                                |                       |         |                              |       |       | 17000                      | 1730       | 1.61            | 20 -                    | 6175  | - 21  | B-103 | B-119 | B-138 |
|                                |                       |         | 24300                        | 2480  | 2.00 |                                |                       |         |                              |       |       | 22900                      | 2340       | 2.00            | 20 -                    | 6180  | - 21  | B-104 | B-120 | B-139 |
|                                |                       |         | 24300                        | 2480  | 2.54 |                                |                       |         |                              |       |       | 22900                      | 2340       | 2.60            | 20 -                    | 6185  | - 21  | B-104 | B-120 | B-139 |
| 58.0                           | 2350                  | 239     | 34000                        | 3470  | 2.73 | 70.0                           | 1940                  | 198     | 32000                        | 3260  | 2.73  | 20 -                       | 6190       | - 21            | B-104                   | B-120 | B-139 |       |       |       |
|                                |                       |         | 16200                        | 1650  | 0.89 |                                |                       |         | 58.0                         | 2350  | 239   | 15400                      | 1570       | 1.01            | 20 -                    | 6165  | - 25  | B-103 | B-119 | B-138 |
|                                |                       |         | 18500                        | 1890  | 1.04 |                                |                       |         |                              |       |       | 17500                      | 1780       | 1.05            | 20 -                    | 6170  | - 25  | B-103 | B-119 | B-138 |
|                                |                       |         | 18500                        | 1890  | 1.30 |                                |                       |         |                              |       |       | 17500                      | 1780       | 1.30            | 20 -                    | 6175  | - 25  | B-103 | B-119 | B-138 |
|                                |                       |         | 25300                        | 2580  | 1.61 |                                |                       |         |                              |       |       | 23800                      | 2430       | 1.61            | 20 -                    | 6180  | - 25  | B-104 | B-120 | B-139 |
|                                |                       |         | 25300                        | 2580  | 2.01 |                                |                       |         |                              |       |       | 23800                      | 2430       | 2.01            | 20 -                    | 6185  | - 25  | B-104 | B-120 | B-139 |
|                                |                       |         | 35600                        | 3620  | 2.35 |                                |                       |         |                              |       |       | 33500                      | 3410       | 2.35            | 20 -                    | 6190  | - 25  | B-104 | B-120 | B-139 |
| 35600                          | 3620                  | 2.70    | 33500                        | 3410  | 2.70 | 20 -                           | 6195                  | - 25    | B-104                        | B-120 | B-139 |                            |            |                 |                         |       |       |       |       |       |

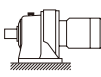
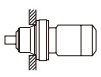
GEARMOTORS

Selection Tables  
15 kW

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

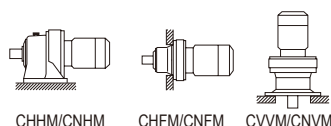


## Selection Tables Gearmotors

| 15 kW                          |                                   | n <sub>1</sub> : Motor Speed |                              |       |      |                                |                                   |         |                              |       |       |  |            |                      |  |       |        |  |        |       |       |       |       |
|--------------------------------|-----------------------------------|------------------------------|------------------------------|-------|------|--------------------------------|-----------------------------------|---------|------------------------------|-------|-------|-------------------------------------------------------------------------------------|------------|----------------------|-------------------------------------------------------------------------------------|-------|--------|-------------------------------------------------------------------------------------|--------|-------|-------|-------|-------|
|                                |                                   | Hz                           |                              | 50Hz  |      |                                |                                   | 60Hz    |                              |       |       |                                                                                     |            |                      |                                                                                     |       |        |                                                                                     |        |       |       |       |       |
|                                |                                   | P                            |                              | 4     |      | 6                              |                                   | 4       |                              | 6     |       |                                                                                     |            |                      |                                                                                     |       |        |                                                                                     |        |       |       |       |       |
|                                |                                   | n <sub>1</sub>               | r/min                        | 1450  |      | 980                            |                                   | 1750    |                              | 1165  |       |                                                                                     |            |                      |                                                                                     |       |        |                                                                                     |        |       |       |       |       |
| 50Hz                           |                                   |                              |                              |       |      | 60Hz                           |                                   |         |                              |       |       | Nomenclature                                                                        |            |                      | Page of Dimension Sheet                                                             |       |        |                                                                                     |        |       |       |       |       |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> |                              | Allowable Radial Load<br>Pro |       | SF   | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> |         | Allowable Radial Load<br>Pro |       | SF    | Input Capacity -<br>Symbol                                                          | Frame Size | -<br>Reduction Ratio | CNHM                                                                                | CNFM  | CNVM   |                                                                                     |        |       |       |       |       |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]                          | [kgf] |      | [r/min]                        | [N·m]                             | [kgf·m] | [N]                          | [kgf] |       |                                                                                     |            |                      | CHHM                                                                                | CHFM  | CVVM   |                                                                                     |        |       |       |       |       |
| 50.0                           | 2720                              | 277                          | 19400                        | 1980  | 1.16 | 60.3                           | 2260                              | 230     | 18400                        | 1870  | 1.25  | 20 -                                                                                | 6175       | - 29                 | B-103                                                                               | B-119 | B-138  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 26400                        | 2690  | 1.30 |                                |                                   |         | 24900                        | 2540  | 1.30  | 20 -                                                                                | 6180       | - 29                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 26400                        | 2690  | 1.61 |                                |                                   |         | 24900                        | 2540  | 1.61  | 20 -                                                                                | 6185       | - 29                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 37400                        | 3810  | 2.05 |                                |                                   |         | 35200                        | 3580  | 2.05  | 20 -                                                                                | 6190       | - 29                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 37400                        | 3810  | 2.52 |                                |                                   |         | 35200                        | 3580  | 2.52  | 20 -                                                                                | 6195       | - 29                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
| 41.4                           | 3280                              | 335                          | 20400                        | 2080  | 0.96 | 50.0                           | 2720                              | 277     | 19400                        | 1970  | 1.01  | 20 -                                                                                | 6175       | - 35                 | B-103                                                                               | B-119 | B-138  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 28100                        | 2860  | 1.23 |                                |                                   |         | 26500                        | 2700  | 1.25  | 20 -                                                                                | 6180       | - 35                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 28100                        | 2860  | 1.51 |                                |                                   |         | 26500                        | 2700  | 1.51  | 20 -                                                                                | 6185       | - 35                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 39400                        | 4020  | 1.62 |                                |                                   |         | 37100                        | 3780  | 1.62  | 20 -                                                                                | 6190       | - 35                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 39400                        | 4020  | 2.01 |                                |                                   |         | 37100                        | 3780  | 2.01  | 20 -                                                                                | 6195       | - 35                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
| 33.7                           | 4040                              | 411                          | 29900                        | 3050  | 1.01 | 40.7                           | 3340                              | 341     | 28300                        | 2880  | 1.01  | 20 -                                                                                | 6180       | - 43                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 29900                        | 3050  | 1.24 |                                |                                   |         | 28300                        | 2880  | 1.25  | 20 -                                                                                | 6185       | - 43                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 42300                        | 4310  | 1.39 |                                |                                   |         | 39900                        | 4060  | 1.39  | 20 -                                                                                | 6190       | - 43                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 42300                        | 4310  | 1.81 |                                |                                   |         | 39900                        | 4060  | 2.01  | 20 -                                                                                | 6195       | - 43                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 77500                        | 7900  | 2.12 |                                |                                   |         | 73300                        | 7480  | 2.12  | 20 -                                                                                | 6205       | - 43                 | B-105                                                                               | B-121 | B-140  |                                                                                     |        |       |       |       |       |
| 28.4                           | 4790                              | 488                          | 30900                        | 3150  | 1.01 | 34.3                           | 3970                              | 404     | 29200                        | 2980  | 1.01  | 20 -                                                                                | 6185       | - 51                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 44100                        | 4490  | 1.21 |                                |                                   |         | 41500                        | 4230  | 1.21  | 20 -                                                                                | 6190       | - 51                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 44100                        | 4490  | 1.39 |                                |                                   |         | 41500                        | 4230  | 1.39  | 20 -                                                                                | 6195       | - 51                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 32100                        | 3270  | 0.80 |                                |                                   |         | 30400                        | 3100  | 0.80  | 20 -                                                                                | 6185       | - 59                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 46000                        | 4690  | 1.02 |                                |                                   |         | 43400                        | 4430  | 1.02  | 20 -                                                                                | 6190       | - 59                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
| 24.6                           | 5540                              | 564                          | 46000                        | 4690  | 1.25 | 29.7                           | 4590                              | 468     | 43400                        | 4430  | 1.25  | 20 -                                                                                | 6195       | - 59                 | B-104                                                                               | B-120 | B-139  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 84100                        | 8570  | 1.51 |                                |                                   |         | 79700                        | 8120  | 1.51  | 20 -                                                                                | 6205       | - 59                 | B-105                                                                               | B-121 | B-140  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 85900                        | 8760  | 2.26 |                                |                                   |         | 81300                        | 8290  | 2.51  | 20 -                                                                                | 6215       | - 59                 | B-105                                                                               | B-121 | B-140  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 20.4                         | 6660  | 679  |                                |                                   |         | 48600                        | 4960  | 1.04  | 24.6                                                                                | 5520       | 563                  | 45900                                                                               | 4680  | 1.04   | 20 -                                                                                | 6195   | - 71  | B-104 | B-120 | B-139 |
|                                |                                   |                              | 16.7                         | 8170  | 832  |                                |                                   |         | 52100                        | 5310  | 0.91  | 20.1                                                                                | 6770       | 690                  | 49200                                                                               | 5010  | 0.91   | 20 -                                                                                | 6195   | - 87  | B-104 | B-120 | B-139 |
| 84100                          | 8570                              | 1.06                         |                              |       |      | 84100                          | 8570                              | 1.06    | 20 -                         | 6205  | - 87  |                                                                                     |            |                      | B-105                                                                               | B-121 | B-140  |                                                                                     |        |       |       |       |       |
| 96100                          | 9790                              | 1.31                         |                              |       |      | 91000                          | 9280                              | 1.43    | 20 -                         | 6215  | - 87  |                                                                                     |            |                      | B-105                                                                               | B-121 | B-140  |                                                                                     |        |       |       |       |       |
| 102000                         | 10400                             | 1.78                         |                              |       |      | 96400                          | 9830                              | 1.78    | 20 -                         | 6225  | - 87☆ |                                                                                     |            |                      | B-106                                                                               | B-122 | B-141  |                                                                                     |        |       |       |       |       |
| 16.6                           | 8190                              | 835                          |                              |       |      | 84100                          | 8570                              | 1.13    | 19.7                         | 6890  | 703   |                                                                                     |            |                      | 84100                                                                               | 8570  | 1.30   | 206 -                                                                               | 6205   | - 59  | B-105 | B-121 | B-140 |
|                                |                                   |                              | 96200                        | 9800  | 1.55 | 91500                          | 9330                              | 1.83    |                              |       |       | 206 -                                                                               | 6215       | - 59                 | B-105                                                                               | B-121 | B-140  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 102000                       | 10400 | 1.94 | 97000                          | 9890                              | 2.22    |                              |       |       | 206 -                                                                               | 6225       | - 59                 | B-106                                                                               | B-122 | B-141  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 13.9                         | 6380  | 650  | 55800                          | 5690                              | *       |                              |       |       | 16.8                                                                                | 5770       | 589                  | 52400                                                                               | 5340  | *      | 20 -                                                                                | 6190DB | - 104 | B-112 | B-128 | B-147 |
|                                |                                   |                              |                              |       |      | 55400                          | 5650                              | *       |                              |       |       |                                                                                     |            |                      | 52400                                                                               | 5340  | *      | 20 -                                                                                | 6195DB | - 104 | B-112 | B-128 | B-147 |
| 7580                           | 773                               | 59000                        |                              |       |      | 6010                           | *                                 | 6720    | 686                          | 55700 | 5680  |                                                                                     |            |                      | *                                                                                   | 20 -  | 6195DB | - 121                                                                               | B-112  | B-128 | B-147 |       |       |
| 8110                           | 828                               | 84100                        |                              |       |      | 8570                           | *                                 | 6720    | 686                          | 84100 | 8570  |                                                                                     |            |                      | *                                                                                   | 20 -  | 6205DB | - 121                                                                               | B-112  | B-129 | B-148 |       |       |
| 12.0                           | 10800                             | 1100                         |                              |       |      | 104000                         | 10600                             | 1.06    | 14.5                         | 8910  | 909   |                                                                                     |            |                      | 101000                                                                              | 10300 | 1.28   | 20 -                                                                                | 6215DB | - 121 | B-113 | B-129 | B-149 |
|                                |                                   |                              | 113000                       | 11600 | 1.25 | 108000                         | 11000                             | 1.51    |                              |       |       | 20 -                                                                                | 6225DB     | - 121                | B-113                                                                               | B-130 | B-149  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 142000                       | 14500 | 1.60 | 135000                         | 13800                             | 1.60    |                              |       |       | 20 -                                                                                | 6235DA     | - 121                | B-114                                                                               | B-114 | B-150  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 142000                       | 14500 | 1.74 | 135000                         | 13800                             | 2.10    |                              |       |       | 20 -                                                                                | 6235DB     | - 121                | B-114                                                                               | B-114 | B-150  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 159000                       | 16200 | 1.91 | 150000                         | 15300                             | 2.30    |                              |       |       | 20 -                                                                                | 6245DB     | - 121                | B-114                                                                               | B-114 | B-150  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 194000                       | 19800 | 2.00 | 184000                         | 18700                             | 2.00    |                              |       |       | 20 -                                                                                | 6255DA     | - 121                | B-115                                                                               | B-132 | B-151  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 194000                       | 19800 | 2.56 | 184000                         | 18700                             | 3.08    |                              |       |       | 20 -                                                                                | 6255DB     | - 121                | B-115                                                                               | B-132 | B-151  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 237000                       | 24200 | 2.91 | 225000                         | 22900                             | 3.21    |                              |       |       | 20 -                                                                                | 6265DA     | - 121                | B-115                                                                               | B-132 | B-151  |                                                                                     |        |       |       |       |       |
|                                |                                   |                              | 11.3                         | 12100 | 1230 | 114000                         | 11600                             | 1.25    |                              |       |       | 13.4                                                                                | 10200      | 1040                 | 108000                                                                              | 11000 | 1.48   | 206 -                                                                               | 6225   | - 87  | B-106 | B-122 | B-141 |
|                                |                                   |                              |                              |       |      | 142000                         | 14500                             | 1.42    |                              |       |       |                                                                                     |            |                      | 135000                                                                              | 13800 | 1.60   | 206 -                                                                               | 6235   | - 87  | B-106 | B-122 | B-141 |
| 159000                         | 16200                             | 1.87                         |                              |       |      | 151000                         | 15400                             | 2.14    | 206 -                        | 6245  | - 87  |                                                                                     |            |                      | B-107                                                                               | B-123 | B-142  |                                                                                     |        |       |       |       |       |
| 196000                         | 19900                             | 2.57                         |                              |       |      | 186000                         | 19000                             | 2.86    | 206 -                        | 6255  | - 87  |                                                                                     |            |                      | B-107                                                                               | B-123 | B-142  |                                                                                     |        |       |       |       |       |



## Selection Tables Gearmotors



15 kW

n: Motor Speed

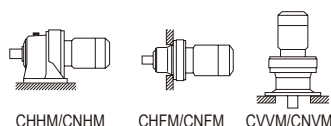
| Hz             |       | 50Hz |     | 60Hz |      |
|----------------|-------|------|-----|------|------|
| P              |       | 4    | 6   | 4    | 6    |
| n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

| 50Hz                                      |                                                    |                                           |        |       | 60Hz                                      |                                                    |                                           |        |       | Nomenclature            |                   |                   | Page of Dimension Sheet |       |       |
|-------------------------------------------|----------------------------------------------------|-------------------------------------------|--------|-------|-------------------------------------------|----------------------------------------------------|-------------------------------------------|--------|-------|-------------------------|-------------------|-------------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] |        | SF    | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] |        | SF    | Input Capacity - Symbol | Frame Size        | Reduction Ratio   | CNHM                    | CNFM  | CNVN  |
| 8.79                                      | 9270                                               | 945                                       | 84100  | 8570  | 10.6                                      | 9160                                               | 935                                       | 84100  | 8570  | 20 - 6205DB - 165       | 20 - 6215DA - 165 | 20 - 6215DB - 165 | B-112                   | B-129 | B-148 |
|                                           | 11700                                              | 1190                                      | 104000 | 10600 |                                           | 9160                                               | 935                                       | 104000 | 10600 |                         |                   |                   | B-112                   | B-129 | B-148 |
|                                           |                                                    |                                           | 104000 | 10600 |                                           |                                                    |                                           | 104000 | 10600 |                         |                   |                   | B-113                   | B-129 | B-149 |
|                                           |                                                    |                                           | 122000 | 12500 |                                           |                                                    |                                           | 116000 | 11800 |                         |                   |                   | B-113                   | B-130 | B-149 |
|                                           |                                                    |                                           | 152000 | 15500 |                                           |                                                    |                                           | 144000 | 14700 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           | 14700                                              | 1500                                      | 170000 | 17400 |                                           | 12200                                              | 1240                                      | 161000 | 16400 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           |                                                    |                                           | 170000 | 17400 |                                           |                                                    |                                           | 161000 | 16400 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           |                                                    |                                           | 209000 | 21300 |                                           |                                                    |                                           | 197000 | 20100 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 209000 | 21300 |                                           |                                                    |                                           | 197000 | 20100 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 254000 | 25900 |                                           |                                                    |                                           | 241000 | 24500 |                         |                   |                   | B-115                   | B-132 | B-151 |
| 7.44                                      | 11800                                              | 1200                                      | 104000 | 10600 | 8.97                                      | 10800                                              | 1100                                      | 104000 | 10600 | 20 - 6215DA - 195       | 20 - 6225DA - 195 | 20 - 6225DB - 195 | B-112                   | B-129 | B-148 |
|                                           | 11800                                              | 1200                                      | 129000 | 13200 |                                           | 10800                                              | 1100                                      | 122000 | 12500 |                         |                   |                   | B-113                   | B-113 | B-149 |
|                                           |                                                    |                                           | 128000 | 13100 |                                           |                                                    |                                           | 122000 | 12400 |                         |                   |                   | B-113                   | B-130 | B-149 |
|                                           |                                                    |                                           | 160000 | 16300 |                                           |                                                    |                                           | 151000 | 15400 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           |                                                    |                                           | 179000 | 18200 |                                           |                                                    |                                           | 169000 | 17200 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           | 17300                                              | 1770                                      | 179000 | 18200 |                                           | 14400                                              | 1460                                      | 169000 | 17200 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           |                                                    |                                           | 219000 | 22300 |                                           |                                                    |                                           | 207000 | 21100 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 219000 | 22300 |                                           |                                                    |                                           | 207000 | 21100 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 267000 | 27200 |                                           |                                                    |                                           | 253000 | 25800 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |                   |                   |                         |       |       |
| 6.28                                      | 14800                                              | 1510                                      | 137000 | 14000 | 7.58                                      | 13500                                              | 1380                                      | 130000 | 13200 | 20 - 6225DA - 231       | 20 - 6235DA - 231 | 20 - 6235DB - 231 | B-113                   | B-113 | B-149 |
|                                           |                                                    |                                           | 171000 | 17400 |                                           |                                                    |                                           | 162000 | 16500 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           |                                                    |                                           | 190000 | 19400 |                                           |                                                    |                                           | 180000 | 18400 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           | 20500                                              | 2090                                      | 232000 | 23700 |                                           | 17000                                              | 1730                                      | 220000 | 22400 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 276000 | 28100 |                                           |                                                    |                                           | 269000 | 27400 |                         |                   |                   | B-115                   | B-132 | B-151 |
| 5.31                                      | 18900                                              | 1930                                      | 179000 | 18200 | 6.41                                      | 18900                                              | 1930                                      | 170000 | 17300 | 20 - 6235DA - 273       | 20 - 6245DA - 273 | 20 - 6255DA - 273 | B-114                   | B-114 | B-150 |
|                                           |                                                    |                                           | 200000 | 20300 |                                           |                                                    |                                           | 189000 | 19300 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           | 24300                                              | 2470                                      | 244000 | 24900 |                                           | 20100                                              | 2050                                      | 231000 | 23500 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 276000 | 28100 |                                           |                                                    |                                           | 276000 | 28100 |                         |                   |                   | B-115                   | B-132 | B-151 |
| 4.55                                      | 18900                                              | 1930                                      | 179000 | 18200 | 5.49                                      | 18900                                              | 1930                                      | 177000 | 18100 | 20 - 6235DA - 319       | 20 - 6245DA - 319 | 20 - 6255DA - 319 | B-114                   | B-114 | B-150 |
|                                           |                                                    |                                           | 208000 | 21200 |                                           |                                                    |                                           | 197000 | 20100 |                         |                   |                   | B-114                   | B-114 | B-150 |
|                                           |                                                    |                                           | 256000 | 26100 |                                           |                                                    |                                           | 243000 | 24800 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           | 28400                                              | 2890                                      | 276000 | 28100 |                                           | 23500                                              | 2400                                      | 276000 | 28100 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 248000 | 25300 |                                           |                                                    |                                           | 248000 | 25300 |                         |                   |                   | B-115                   | -     | B-151 |
| 3.85                                      | 25800                                              | 2630                                      | 208000 | 21200 | 4.64                                      | 25800                                              | 2630                                      | 207000 | 21100 | 20 - 6245DA - 377       | 20 - 6255DA - 377 | 20 - 6265DA - 377 | B-114                   | B-114 | B-150 |
|                                           |                                                    |                                           | 258000 | 26300 |                                           |                                                    |                                           | 255000 | 26000 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           | 33500                                              | 3420                                      | 276000 | 28100 |                                           | 27800                                              | 2830                                      | 276000 | 28100 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 248000 | 25300 |                                           |                                                    |                                           | 248000 | 25300 |                         |                   |                   | B-115                   | -     | B-151 |
| 3.07                                      | 25800                                              | 2630                                      | 208000 | 21200 | 3.70                                      | 25800                                              | 2630                                      | 208000 | 21200 | 20 - 6245DA - 473       | 20 - 6255DA - 473 | 20 - 6265DA - 473 | B-114                   | B-114 | B-150 |
|                                           | 34500                                              | 3520                                      | 258000 | 26300 |                                           | 34500                                              | 3520                                      | 258000 | 26300 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 258000 | 26300 |                                           |                                                    |                                           | 258000 | 26300 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 258000 | 26300 |                                           |                                                    |                                           | 258000 | 26300 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           | 42100                                              | 4290                                      | 276000 | 28100 |                                           | 34800                                              | 3550                                      | 276000 | 28100 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 248000 | 25300 |                                           |                                                    |                                           | 248000 | 25300 |                         |                   |                   | B-115                   | -     | B-151 |
| 2.59                                      | 34500                                              | 3520                                      | 258000 | 26300 | 3.13                                      | 34500                                              | 3520                                      | 258000 | 26300 | 20 - 6255DA - 559       | 20 - 6265DA - 559 | 20 - 6275DA - 559 | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 276000 | 28100 |                                           |                                                    |                                           | 276000 | 28100 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           | 49700                                              | 5070                                      | 248000 | 25300 |                                           | 41200                                              | 4200                                      | 248000 | 25300 |                         |                   |                   | B-115                   | -     | B-151 |
| 2.23                                      | 46000                                              | 4690                                      | 276000 | 28100 | 2.70                                      | 46000                                              | 4690                                      | 276000 | 28100 | 20 - 6265DA - 649       | 20 - 6275DA - 649 | 20 - 6285DA - 649 | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           | 276000 | 28100 |                                           |                                                    |                                           | 276000 | 28100 |                         |                   |                   | B-115                   | B-132 | B-151 |
|                                           | 57700                                              | 5880                                      | 248000 | 25300 |                                           | 47800                                              | 4870                                      | 276000 | 28100 |                         |                   |                   | B-115                   | -     | B-151 |
| 1.98                                      | 46000                                              | 4690                                      | 276000 | 28100 | 2.39                                      | 46000                                              | 4690                                      | 276000 | 28100 | 20 - 6265DA - 731       | 20 - 6275DA - 731 | 20 - 6285DA - 731 | B-115                   | B-132 | B-151 |
|                                           | 65000                                              | 6630                                      | 248000 | 25300 |                                           | 53900                                              | 5490                                      | 248000 | 25300 |                         |                   |                   | B-115                   | -     | B-151 |
| 1.72                                      | 46000                                              | 4690                                      | 276000 | 28100 | 2.08                                      | 46000                                              | 4690                                      | 276000 | 28100 | 20 - 6265DA - 841       | 20 - 6275DA - 841 | 20 - 6285DA - 841 | B-115                   | B-132 | B-151 |
|                                           | 74800                                              | 7620                                      | 248000 | 25300 |                                           | 62000                                              | 6320                                      | 248000 | 25300 |                         |                   |                   | B-115                   | -     | B-151 |
| 1.45                                      | 68200                                              | 6950                                      | 248000 | 25300 | 1.74                                      | 68200                                              | 6950                                      | 248000 | 25300 | 20 - 6275DA - 1003      |                   |                   | B-115                   | -     | B-151 |
| 1.16                                      | 68200                                              | 6950                                      | 248000 | 25300 | 1.40                                      | 68200                                              | 6950                                      | 248000 | 25300 | 20 - 6275DA - 1247      |                   |                   | B-115                   | -     | B-151 |

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect  $n_1$  and  $n_2$ . Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors

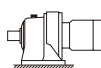
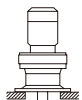


|         |                |       |      |     |      |      |
|---------|----------------|-------|------|-----|------|------|
| 18.5 kW | Hz             |       | 50Hz |     | 60Hz |      |
|         | P              |       | 4    | 6   | 4    | 6    |
|         | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

| 50Hz                                      |                                                    |                                           |        |       | 60Hz                                      |                                                    |                                           |        |       | Nomenclature            |            |                 | Page of Dimension Sheet |       |       |
|-------------------------------------------|----------------------------------------------------|-------------------------------------------|--------|-------|-------------------------------------------|----------------------------------------------------|-------------------------------------------|--------|-------|-------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF     |       | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF     |       | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVM  |
| 50.0                                      | 3360                                               | 342                                       | 19000  | 1940  | 60.3                                      | 2780                                               | 284                                       | 18100  | 1840  | 25 -                    | 6175       | - 29            | B-103                   | B-119 | B-138 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-105                   | B-121 | B-140 |
| 41.4                                      | 4050                                               | 413                                       | 27800  | 2830  | 50.0                                      | 3360                                               | 342                                       | 26300  | 2680  | 25 -                    | 6180       | - 35            | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
| 33.7                                      | 4980                                               | 507                                       | 29500  | 3010  | 40.7                                      | 4120                                               | 420                                       | 28000  | 2850  | 25 -                    | 6185       | - 43            | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-105                   | B-121 | B-140 |
| 28.4                                      | 5900                                               | 602                                       | 30400  | 3100  | 34.3                                      | 4890                                               | 499                                       | 28900  | 2940  | 25 -                    | 6185       | - 51            | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-104                   | B-120 | B-139 |
| 24.6                                      | 6830                                               | 696                                       | 45700  | 4660  | 29.7                                      | 5660                                               | 577                                       | 43100  | 4400  | 25 -                    | 6195       | - 59            | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-105                   | B-121 | B-140 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-105                   | B-121 | B-140 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-106                   | B-122 | B-141 |
| 22.8                                      | 7360                                               | 751                                       | 47400  | 4830  | 27.1                                      | 6190                                               | 631                                       | 45000  | 4580  | 256 -                   | 6215       | - 43            | B-104                   | B-120 | B-139 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-105                   | B-121 | B-140 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-106                   | B-122 | B-141 |
| 20.4                                      | 8220                                               | 838                                       | 48100  | 4910  | 24.6                                      | 6810                                               | 694                                       | 45500  | 4640  | 25 -                    | 6195       | - 71            | B-104                   | B-120 | B-139 |
| 16.7                                      | 10100                                              | 1030                                      | 95600  | 9740  | 20.1                                      | 8340                                               | 851                                       | 90600  | 9240  | 25 -                    | 6215       | - 87            | B-105                   | B-121 | B-140 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-106                   | B-122 | B-141 |
| 16.6                                      | 10100                                              | 1030                                      | 95700  | 9760  | 19.7                                      | 8500                                               | 866                                       | 91100  | 9290  | 256 -                   | 6215       | - 59            | B-105                   | B-121 | B-140 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-106                   | B-122 | B-141 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-106                   | B-122 | B-142 |
| 12.0                                      | 13300                                              | 1350                                      | 104000 | 10600 | 14.5                                      | 11000                                              | 1120                                      | 101000 | 10300 | 25 -                    | 6215DB     | - 121           | B-113                   | B-130 | B-149 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-113                   | B-130 | B-149 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-114                   | B-131 | B-150 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-114                   | B-131 | B-150 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-114                   | B-131 | B-150 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-115                   | B-132 | B-151 |
| 11.3                                      | 14900                                              | 1520                                      | 113000 | 11500 | 13.4                                      | 12500                                              | 1280                                      | 108000 | 11000 | 256 -                   | 6225       | - 87            | B-106                   | B-122 | B-141 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-106                   | B-122 | B-142 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-107                   | B-123 | B-142 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-107                   | B-123 | B-142 |
| 8.79                                      | 18100                                              | 1840                                      | 14500  | 1480  | 10.6                                      | 15000                                              | 1530                                      | 115000 | 11800 | 25 -                    | 6225DB     | - 165           | B-113                   | B-130 | B-149 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-113                   | B-130 | B-149 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-114                   | B-131 | B-150 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-114                   | B-131 | B-150 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-114                   | B-131 | B-150 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-114                   | B-131 | B-150 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-115                   | B-132 | B-151 |
|                                           |                                                    |                                           |        |       |                                           |                                                    |                                           |        |       |                         |            |                 | B-115                   | B-132 | B-151 |

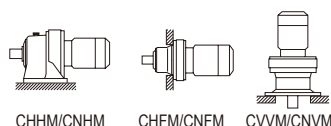
- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

|                |                              |       |      |      |      |      |                                                                                       |  |  |                                                                                       |           |  |                                                                                       |           |  |  |           |  |  |
|----------------|------------------------------|-------|------|------|------|------|---------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------|-----------|--|---------------------------------------------------------------------------------------|-----------|--|--|-----------|--|--|
| 22 kW          | n <sub>1</sub> : Motor Speed |       |      |      |      |      |  |  |  |  |           |  |  |           |  |  |           |  |  |
|                | Hz                           |       | 50Hz |      | 60Hz |      |                                                                                       |  |  |                                                                                       |           |  |                                                                                       |           |  |  |           |  |  |
|                | P                            |       | 4    | 6    | 4    | 6    |                                                                                       |  |  |                                                                                       |           |  |                                                                                       |           |  |  |           |  |  |
| n <sub>1</sub> |                              | r/min |      | 1450 | 980  | 1750 | 1165                                                                                  |  |  |                                                                                       | CHHM/CNHM |  |                                                                                       | CHFM/CNFM |  |  | CVVM/CNVM |  |  |

| 50Hz                           |                                   |                              |              |             |             | 60Hz                           |                                   |                              |              |             |             | Nomenclature               |            |                 | Page of Dimension Sheet |       |          |              |              |              |
|--------------------------------|-----------------------------------|------------------------------|--------------|-------------|-------------|--------------------------------|-----------------------------------|------------------------------|--------------|-------------|-------------|----------------------------|------------|-----------------|-------------------------|-------|----------|--------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |              | SF          |             | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |              | SF          |             | Input Capacity -<br>Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVM     |              |              |              |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]          |             |             | [kgf]                          | [r/min]                           | [N·m]                        | [kgf·m]      |             |             |                            |            |                 |                         |       |          | [N]          | [kgf]        |              |
|                                |                                   |                              | <b>10100</b> | <b>1020</b> | <b>1.10</b> |                                |                                   |                              | <b>9510</b>  | <b>969</b>  | <b>1.10</b> |                            |            |                 | <b>30 - 6165</b>        | -     | <b>6</b> | <b>B-103</b> | <b>B-119</b> | <b>B-138</b> |
| 242                            | 826                               | 84.2                         | 11500        | 1170        | 1.25        | 292                            | 684                               | 69.8                         | 10800        | 1100        | 1.25        | 30 -                       | 6170       | -               | 6                       | B-103 | B-119    | B-138        |              |              |
|                                |                                   |                              | 11500        | 1170        | 1.37        |                                |                                   |                              | 10800        | 1100        | 1.37        | 30 -                       | 6175       | -               | 6                       | B-103 | B-119    | B-138        |              |              |
|                                |                                   |                              | <b>11200</b> | <b>1140</b> | <b>1.10</b> |                                |                                   |                              | <b>10600</b> | <b>1080</b> | <b>1.10</b> |                            |            |                 | <b>30 - 6165</b>        | -     | <b>8</b> | <b>B-103</b> | <b>B-119</b> | <b>B-138</b> |
| 181                            | 1100                              | 112                          | 12600        | 1290        | 1.25        | 219                            | 912                               | 93.0                         | 11900        | 1220        | 1.25        | 30 -                       | 6170       | -               | 8                       | B-103 | B-119    | B-138        |              |              |
|                                |                                   |                              | 12600        | 1290        | 1.37        |                                |                                   |                              | 11900        | 1220        | 1.37        | 30 -                       | 6175       | -               | 8                       | B-103 | B-119    | B-138        |              |              |

- B-84 Gearmotors / Selection Tables

## Selection Tables Gearmotors



|       |                |       |      |     |      |      |
|-------|----------------|-------|------|-----|------|------|
| 22 kW | Hz             |       | 50Hz |     | 60Hz |      |
|       | P              |       | 4    | 6   | 4    | 6    |
|       | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

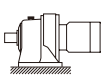
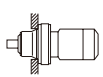
n: Motor Speed

| 50Hz                                      |                                                    |                                           |    |  | 60Hz                                      |                                                    |                                           |    |  | Nomenclature            |            |                 | Page of Dimension Sheet |                |       |
|-------------------------------------------|----------------------------------------------------|-------------------------------------------|----|--|-------------------------------------------|----------------------------------------------------|-------------------------------------------|----|--|-------------------------|------------|-----------------|-------------------------|----------------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF |  | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] [kgf·m] | Allowable Radial Load<br>Pro<br>[N] [kgf] | SF |  | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHN CNFM CNVM          | CHHM CHFM CVVM |       |
| 132                                       | 1510                                               | 154                                       |    |  | 159                                       | 1250                                               | 128                                       |    |  | 30 -                    | 6165       | - 11            | B-103                   | B-119          | B-138 |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
| 112                                       | 1790                                               | 182                                       |    |  | 135                                       | 1480                                               | 151                                       |    |  | 30 -                    | 6165       | - 13            | B-103                   | B-119          | B-138 |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
| 96.7                                      | 2060                                               | 210                                       |    |  | 117                                       | 1710                                               | 174                                       |    |  | 30 -                    | 6165       | - 15            | B-103                   | B-119          | B-138 |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
| 85.3                                      | 2340                                               | 239                                       |    |  | 103                                       | 1940                                               | 198                                       |    |  | 30 -                    | 6165       | - 17            | B-103                   | B-119          | B-138 |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
| 69.0                                      | 2890                                               | 295                                       |    |  | 83.3                                      | 2400                                               | 244                                       |    |  | 30 -                    | 6175       | - 21            | B-103                   | B-119          | B-138 |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
| 58.0                                      | 3440                                               | 351                                       |    |  | 70.0                                      | 2850                                               | 291                                       |    |  | 30 -                    | 6180       | - 25            | B-104                   | B-120          | B-139 |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
| 50.0                                      | 3990                                               | 407                                       |    |  | 60.3                                      | 3310                                               | 337                                       |    |  | 30 -                    | 6185       | - 29            | B-104                   | B-120          | B-139 |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
| 41.4                                      | 4820                                               | 491                                       |    |  | 50.0                                      | 3990                                               | 407                                       |    |  | 30 -                    | 6185       | - 35            | B-104                   | B-120          | B-139 |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
| 33.7                                      | 5920                                               | 603                                       |    |  | 40.7                                      | 4900                                               | 500                                       |    |  | 30 -                    | 6190       | - 43            | B-104                   | B-120          | B-139 |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
|                                           |                                                    |                                           |    |  |                                           |                                                    |                                           |    |  |                         |            |                 |                         |                |       |
| 28.4                                      | 7020                                               | 716                                       |    |  | 34.3                                      | 5820                                               | 593                                       |    |  | 30 -                    | 6195       | - 51            | B-104                   | B-120          | B-139 |

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

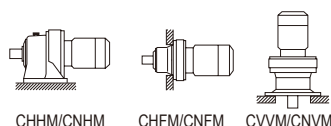


## Selection Tables Gearmotors

| 22 kW                          |                                   | n <sub>1</sub> : Motor Speed |               |              |                                |                                   |                              |  |        |                         |  |                 |       |  |                         |                  |              |              |                    |              |              |              |              |
|--------------------------------|-----------------------------------|------------------------------|---------------|--------------|--------------------------------|-----------------------------------|------------------------------|-------------------------------------------------------------------------------------|--------|-------------------------|-------------------------------------------------------------------------------------|-----------------|-------|-------------------------------------------------------------------------------------|-------------------------|------------------|--------------|--------------|--------------------|--------------|--------------|--------------|--------------|
|                                |                                   | Hz                           |               | 50Hz         |                                | 60Hz                              |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         |                  |              |              |                    |              |              |              |              |
|                                |                                   | P                            |               | 4            | 6                              | 4                                 | 6                            |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         |                  |              |              |                    |              |              |              |              |
| n <sub>1</sub>                 |                                   | r/min                        |               | 1450         |                                | 980                               |                              | 1750                                                                                |        | 1165                    |                                                                                     | CHHM/CNHM       |       |                                                                                     | CHFM/CNFM               |                  |              | CNVM/CNVM    |                    |              |              |              |              |
| 50Hz                           |                                   |                              |               |              |                                | 60Hz                              |                              |                                                                                     |        |                         |                                                                                     | Nomenclature    |       |                                                                                     | Page of Dimension Sheet |                  |              |              |                    |              |              |              |              |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |               | SF           | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |                                                                                     | SF     | Input Capacity - Symbol | Frame Size                                                                          | Reduction Ratio | CNHM  | CNFM                                                                                | CNVM                    |                  |              |              |                    |              |              |              |              |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]           | [kgf]        | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]                                                                                 | [kgf]  |                         |                                                                                     |                 | CHHM  | CHFM                                                                                | CVVM                    |                  |              |              |                    |              |              |              |              |
| 24.6                           | 8120                              | 828                          | 45300         | 4620         | 0.85                           | 29.7                              | 6730                         | 686                                                                                 |        |                         |                                                                                     |                 | B-104 | B-120                                                                               | B-130                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | <b>83600</b>  | <b>8520</b>  | <b>1.03</b>                    |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | <b>30 - 6195</b> | <b>- 59</b>  | <b>B-105</b> | <b>B-121</b>       | <b>B-140</b> |              |              |              |
|                                |                                   |                              | 85300         | 8690         | 1.54                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 30 - 6215        | - 59         | B-105        | B-121              | B-140        |              |              |              |
|                                |                                   |                              | 90500         | 9220         | 1.79                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 30 - 6225        | - 59         | B-106        | B-122              | B-141        |              |              |              |
| 22.8                           | 8760                              | 893                          | <b>84100</b>  | <b>8570</b>  | <b>1.06</b>                    | 27.1                              | 7370                         | 751                                                                                 |        |                         |                                                                                     |                 | B-105 | B-121                                                                               | B-140                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | 88000         | 8970         | 1.45                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 306 - 6215       | - 43         | B-105        | B-121              | B-140        |              |              |              |
|                                |                                   |                              | 93400         | 9520         | 1.83                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 306 - 6225       | - 43         | B-106        | B-122              | B-141        |              |              |              |
|                                |                                   |                              | <b>101000</b> | <b>10300</b> | <b>1.21</b>                    |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | <b>30 - 6225</b> | <b>- 87</b>  | <b>B-106</b> | <b>B-122</b>       | <b>B-141</b> |              |              |              |
| 16.7                           | 12000                             | 1220                         | <b>95200</b>  | <b>9710</b>  | <b>1.05</b>                    | 20.1                              | 9920                         | 1010                                                                                |        |                         |                                                                                     |                 | B-105 | B-121                                                                               | B-140                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | 101000        | 10300        | 1.32                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 306 - 6215       | - 59         | B-106        | B-122              | B-141        |              |              |              |
|                                |                                   |                              | 141000        | 14400        | 2.15                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 306 - 6245       | - 59         | B-107        | B-123              | B-142        |              |              |              |
|                                |                                   |                              | <b>101000</b> | <b>10300</b> | <b>1.21</b>                    |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | <b>30 - 6225</b> | <b>- 87</b>  | <b>B-106</b> | <b>B-122</b>       | <b>B-141</b> |              |              |              |
| 12.0                           | 15800                             | 1610                         | 11400         | 1160         | *                              | 14.5                              | 13100                        | 1330                                                                                |        |                         |                                                                                     |                 | B-113 | B-130                                                                               | B-149                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | 112000        | 11400        | 0.85                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 101000           | 10300        | 1.03         | 30 - 6215DB        | - 121        | B-113        | B-130        | B-149        |
|                                |                                   |                              | <b>141000</b> | <b>14400</b> | <b>1.09</b>                    |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | <b>134000</b>    | <b>13700</b> | <b>1.09</b>  | <b>30 - 6235DA</b> | <b>- 121</b> | <b>B-114</b> | <b>B-131</b> | <b>B-150</b> |
|                                |                                   |                              | 141000        | 14400        | 1.19                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 134000           | 13700        | 1.43         | 30 - 6235DB        | - 121        | B-114        | B-131        | B-150        |
|                                |                                   |                              | 157000        | 16000        | 1.30                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 149000           | 15200        | 1.57         | 30 - 6245DB        | - 121        | B-114        | B-131        | B-150        |
|                                |                                   |                              | 193000        | 19700        | 1.37                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 183000           | 18700        | 1.37         | 30 - 6255DA        | - 121        | B-115        | B-132        | B-151        |
|                                |                                   |                              | 193000        | 19700        | 1.74                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 183000           | 18700        | 2.10         | 30 - 6255DB        | - 121        | B-115        | B-132        | B-151        |
|                                |                                   |                              | 237000        | 24100        | 1.99                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 224000           | 22800        | 2.31         | 30 - 6265DA        | - 121        | B-115        | B-132        | B-151        |
| 11.3                           | 17700                             | 1810                         | 158000        | 16100        | 1.28                           | 13.4                              | 14900                        | 1520                                                                                |        |                         |                                                                                     |                 | B-107 | B-123                                                                               | B-142                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | 195000        | 19800        | 1.75                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 150000           | 15300        | 1.46         | 306 - 6245         | - 87         | B-107        | B-123        | B-142        |
|                                |                                   |                              | 237000        | 24200        | 2.43                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 185000           | 18900        | 1.95         | 306 - 6255         | - 87         | B-107        | B-123        | B-142        |
|                                |                                   |                              |               |              |                                |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 226000           | 23000        | 2.43         | 306 - 6265         | - 87         | B-107        | B-123        | B-142        |
| 8.79                           | 21500                             | 2190                         | 151000        | 15400        | 0.91                           | 10.6                              | 17800                        | 1820                                                                                |        |                         |                                                                                     |                 | B-114 | B-131                                                                               | B-150                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | <b>169000</b> | <b>17200</b> | <b>1.09</b>                    |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 143000           | 14600        | 1.10         | 30 - 6235DA        | - 165        | B-114        | B-131        | B-150        |
|                                |                                   |                              | 169000        | 17200        | 1.22                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | <b>160000</b>    | <b>16300</b> | <b>1.09</b>  | <b>30 - 6245DA</b> | <b>- 165</b> | <b>B-114</b> | <b>B-131</b> | <b>B-150</b> |
|                                |                                   |                              | 207000        | 21100        | 1.37                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 160000           | 16300        | 1.47         | 30 - 6245DB        | - 165        | B-114        | B-131        | B-150        |
|                                |                                   |                              | 207000        | 21100        | 1.45                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 196000           | 20000        | 1.37         | 30 - 6255DA        | - 165        | B-115        | B-132        | B-151        |
|                                |                                   |                              | 253000        | 25800        | 2.03                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 196000           | 20000        | 1.75         | 30 - 6255DB        | - 165        | B-115        | B-132        | B-151        |
| 7.44                           | 25400                             | 2590                         | 19600         | 2000         | *                              | 8.97                              | 21100                        | 2150                                                                                |        |                         |                                                                                     |                 | B-115 | B-132                                                                               | B-151                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | <b>177000</b> | <b>18000</b> | <b>1.02</b>                    |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 240000           | 24400        | 2.31         | 30 - 6265DA        | - 165        | B-115        | B-132        | B-151        |
|                                |                                   |                              | 177000        | 18000        | 1.03                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 150000           | 15300        | *            | 30 - 6235DA        | - 195        | B-114        | B-131        | B-150        |
|                                |                                   |                              | 218000        | 22200        | 1.23                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | <b>168000</b>    | <b>17100</b> | <b>1.02</b>  | <b>30 - 6245DA</b> | <b>- 195</b> | <b>B-114</b> | <b>B-131</b> | <b>B-150</b> |
|                                |                                   |                              | 218000        | 22200        | 1.23                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 168000           | 17100        | 1.25         | 30 - 6245DB        | - 195        | B-114        | B-131        | B-150        |
|                                |                                   |                              | 266000        | 27100        | 1.72                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 206000           | 21000        | 1.37         | 30 - 6255DA        | - 195        | B-115        | B-132        | B-151        |
| 6.28                           | 30100                             | 3070                         | 188000        | 19200        | 0.86                           | 7.58                              | 25000                        | 2540                                                                                |        |                         |                                                                                     |                 | B-114 | B-131                                                                               | B-150                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | <b>231000</b> | <b>23500</b> | <b>1.03</b>                    |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 206000           | 21000        | 1.48         | 30 - 6255DB        | - 195        | B-115        | B-132        | B-151        |
|                                |                                   |                              | 276000        | 28100        | 1.53                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 252000           | 25700        | 2.08         | 30 - 6265DA        | - 195        | B-115        | B-132        | B-151        |
|                                |                                   |                              |               |              |                                |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 179000           | 18200        | 1.03         | 30 - 6245DA        | - 231        | B-114        | B-131        | B-150        |
| 5.31                           | 35600                             | 3630                         | 25800         | 2630         | *                              | 6.41                              | 29500                        | 3010                                                                                |        |                         |                                                                                     |                 | B-115 | B-132                                                                               | B-151                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | <b>177000</b> | <b>18000</b> | <b>1.03</b>                    |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 219000           | 22300        | <b>1.24</b>  | <b>30 - 6255DA</b> | <b>- 231</b> | <b>B-115</b> | <b>B-132</b> | <b>B-151</b> |
|                                |                                   |                              | 218000        | 22200        | 1.23                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 268000           | 27300        | 1.84         | 30 - 6265DA        | - 231        | B-115        | B-132        | B-151        |
|                                |                                   |                              | 276000        | 28100        | 1.29                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 206000           | 21000        | 1.56         | 30 - 6245DA        | - 273        | B-114        | B-131        | B-150        |
| 4.55                           | 41600                             | 4240                         | 242000        | 24700        | 0.87                           | 5.49                              | 34500                        | 3510                                                                                |        |                         |                                                                                     |                 | B-115 | B-132                                                                               | B-151                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | 276000        | 28100        | 1.11                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 229000           | 23400        | 1.05         | 30 - 6255DA        | - 273        | B-115        | B-132        | B-151        |
|                                |                                   |                              | 248000        | 25300        | 1.64                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 276000           | 28100        | 1.33         | 30 - 6265DA        | - 273        | B-115        | B-132        | B-151        |
|                                |                                   |                              |               |              |                                |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 241000           | 24600        | *            | 30 - 6255DA        | - 319        | B-115        | B-132        | B-151        |
| 3.85                           | 49200                             | 5010                         | 276000        | 28100        | 0.94                           | 4.64                              | 40700                        | 4150                                                                                |        |                         |                                                                                     |                 | B-115 | B-132                                                                               | B-151                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | 248000        | 25300        | 1.39                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 248000           | 25300        | 1.98         | 30 - 6275DA        | - 319        | B-115        | -            | B-151        |
| 3.07                           | 61700                             | 6290                         | 276000        | 28100        | *                              | 3.70                              | 51100                        | 5210                                                                                |        |                         |                                                                                     |                 | B-115 | B-132                                                                               | B-151                   |                  |              |              |                    |              |              |              |              |
|                                |                                   |                              | 248000        | 25300        | 1.11                           |                                   |                              |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         | 276000           | 28100        | 1.33         | 30 - 6265DA        | - 377        | B-115        | B-132        | B-151        |
| 2.59                           | 72900                             | 7430                         | 248000        | 25300        | 0.94                           | 3.13                              | 60400                        | 6160                                                                                | 248000 | 25300                   | 1.13                                                                                | 30 - 6275DA     | - 559 | B-115                                                                               | -                       | B-151            |              |              |                    |              |              |              |              |
| 2.23                           | 84600                             | 8630                         | 68200         | 6950         | 248000                         | 25300                             | *                            | 2.70                                                                                | 70100  | 7150                    | 248000                                                                              | 25300           | 0.97  | 30 - 6275DA                                                                         | - 649                   | B-115            | -            | B-151        |                    |              |              |              |              |
|                                |                                   |                              | 248000        | 25300        | 0.81                           | 276000                            | 28100                        |                                                                                     |        |                         |                                                                                     |                 |       |                                                                                     |                         |                  |              |              | 1.13               | 30 - 6265DA  | - 377        | B-115        | -            |
| 1.98                           | 68200                             | 6950                         | 248000        | 25300        | *                              | 2.39                              | 68200                        | 6950                                                                                | 248000 | 25300                   | *                                                                                   | 30 - 6275DA     | - 731 | B-115                                                                               | -                       | B-151            |              |              |                    |              |              |              |              |



## Selection Tables Gearmotors



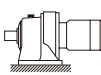
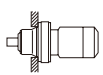
n: Motor Speed

| 30 kW | Hz             |       | 50Hz |     | 60Hz |      |
|-------|----------------|-------|------|-----|------|------|
|       | P              |       | 4    | 6   | 4    | 6    |
|       | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

| 50Hz                                      |                                            |                                              |                                     |                                       |             | 60Hz                                      |                                            |                                              |                                     |                                       |             | Nomenclature            |             |                 | Page of Dimension Sheet |              |              |
|-------------------------------------------|--------------------------------------------|----------------------------------------------|-------------------------------------|---------------------------------------|-------------|-------------------------------------------|--------------------------------------------|----------------------------------------------|-------------------------------------|---------------------------------------|-------------|-------------------------|-------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] | Output Torque<br>T <sub>out</sub><br>[kgf·m] | Allowable Radial Load<br>Pro<br>[N] | Allowable Radial Load<br>Pro<br>[kgf] | SF          | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>T <sub>out</sub><br>[N·m] | Output Torque<br>T <sub>out</sub><br>[kgf·m] | Allowable Radial Load<br>Pro<br>[N] | Allowable Radial Load<br>Pro<br>[kgf] | SF          | Input Capacity - Symbol | Frame Size  | Reduction Ratio | CNHM                    | CNFM         | CNVVM        |
| 242                                       | 1130                                       | 115                                          | <b>11300</b>                        | <b>1150</b>                           | <b>1.00</b> | 292                                       | 933                                        | 95.1                                         | <b>10700</b>                        | <b>1090</b>                           | <b>1.00</b> | 40 -                    | <b>6175</b> | - 6             | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
| 181                                       | 1500                                       | 153                                          | <b>12400</b>                        | <b>1260</b>                           | <b>1.00</b> | 219                                       | 1240                                       | 127                                          | <b>11700</b>                        | <b>1200</b>                           | <b>1.00</b> | 40 -                    | <b>6175</b> | - 8             | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
| 132                                       | 2060                                       | 210                                          | <b>14100</b>                        | <b>1440</b>                           | <b>1.00</b> | 159                                       | 1710                                       | 174                                          | <b>13400</b>                        | <b>1370</b>                           | <b>1.00</b> | 40 -                    | <b>6175</b> | - 11            | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
|                                           |                                            |                                              | 19200                               | 1960                                  | 1.17        |                                           |                                            |                                              | 18200                               | 1850                                  | 1.17        | 40 -                    | 6180        | - 11            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 19200                               | 1960                                  | 1.30        |                                           |                                            |                                              | 18200                               | 1850                                  | 1.30        | 40 -                    | 6185        | - 11            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 27100                               | 2760                                  | 1.37        |                                           |                                            |                                              | 25500                               | 2600                                  | 1.37        | 40 -                    | 6190        | - 11            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 27100                               | 2760                                  | 1.60        |                                           |                                            |                                              | 25500                               | 2600                                  | 1.60        | 40 -                    | 6195        | - 11            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 52200                               | 5320                                  | 1.99        |                                           |                                            |                                              | 49400                               | 5030                                  | 1.99        | 40 -                    | 6205        | - 11            | B-105                   | B-121        | B-140        |
| 112                                       | 2440                                       | 249                                          | <b>14600</b>                        | <b>1490</b>                           | <b>1.00</b> | 135                                       | 2020                                       | 206                                          | <b>13900</b>                        | <b>1420</b>                           | <b>1.00</b> | 40 -                    | <b>6175</b> | - 13            | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
|                                           |                                            |                                              | 19900                               | 2030                                  | 1.17        |                                           |                                            |                                              | 18800                               | 1920                                  | 1.17        | 40 -                    | 6180        | - 13            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 19900                               | 2030                                  | 1.30        |                                           |                                            |                                              | 18800                               | 1920                                  | 1.30        | 40 -                    | 6185        | - 13            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 28200                               | 2870                                  | 1.37        |                                           |                                            |                                              | 26500                               | 2710                                  | 1.37        | 40 -                    | 6190        | - 13            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 28200                               | 2870                                  | 1.60        |                                           |                                            |                                              | 26500                               | 2710                                  | 1.60        | 40 -                    | 6195        | - 13            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | <b>15100</b>                        | <b>1540</b>                           | <b>1.00</b> |                                           |                                            |                                              | <b>14400</b>                        | <b>1470</b>                           | <b>1.00</b> | 40 -                    | <b>6175</b> | - 15            | <b>B-103</b>            | <b>B-119</b> | <b>B-138</b> |
| 96.7                                      | 2820                                       | 287                                          | 20900                               | 2130                                  | 1.08        | 117                                       | 2330                                       | 238                                          | 19800                               | 2020                                  | 1.08        | 40 -                    | 6180        | - 15            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 20900                               | 2130                                  | 1.30        |                                           |                                            |                                              | 19800                               | 2020                                  | 1.30        | 40 -                    | 6185        | - 15            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 29500                               | 3010                                  | 1.37        |                                           |                                            |                                              | 27800                               | 2840                                  | 1.37        | 40 -                    | 6190        | - 15            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 29500                               | 3010                                  | 1.60        |                                           |                                            |                                              | 27800                               | 2840                                  | 1.60        | 40 -                    | 6195        | - 15            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 56000                               | 5710                                  | 1.99        |                                           |                                            |                                              | 53000                               | 5410                                  | 1.99        | 40 -                    | 6205        | - 15            | B-105                   | B-121        | B-140        |
|                                           |                                            |                                              | 56800                               | 5790                                  | 2.51        |                                           |                                            |                                              | 53800                               | 5480                                  | 2.51        | 40 -                    | 6215        | - 15            | B-105                   | B-121        | B-140        |
| 85.3                                      | 3190                                       | 325                                          | 15700                               | 1600                                  | 0.80        | 103                                       | 2640                                       | 270                                          | 14900                               | 1520                                  | 0.80        | 40 -                    | 6175        | - 17            | B-103                   | B-119        | B-138        |
|                                           |                                            |                                              | <b>22000</b>                        | <b>2240</b>                           | <b>1.02</b> |                                           |                                            |                                              | <b>20800</b>                        | <b>2120</b>                           | <b>1.02</b> | 40 -                    | <b>6180</b> | - 17            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
|                                           |                                            |                                              | 22000                               | 2240                                  | 1.27        |                                           |                                            |                                              | 20800                               | 2120                                  | 1.30        | 40 -                    | 6185        | - 17            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 31100                               | 3170                                  | 1.37        |                                           |                                            |                                              | 29300                               | 2990                                  | 1.37        | 40 -                    | 6190        | - 17            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 31100                               | 3170                                  | 1.60        |                                           |                                            |                                              | 29300                               | 2990                                  | 1.60        | 40 -                    | 6195        | - 17            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | <b>23600</b>                        | <b>2410</b>                           | <b>1.00</b> |                                           |                                            |                                              | <b>22400</b>                        | <b>2280</b>                           | <b>1.00</b> | 40 -                    | <b>6180</b> | - 21            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
| 69.0                                      | 3940                                       | 402                                          | 23600                               | 2410                                  | 1.27        | 83.3                                      | 3270                                       | 333                                          | 22400                               | 2280                                  | 1.30        | 40 -                    | 6185        | - 21            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 33500                               | 3410                                  | 1.37        |                                           |                                            |                                              | 31500                               | 3220                                  | 1.37        | 40 -                    | 6190        | - 21            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 33500                               | 3410                                  | 1.60        |                                           |                                            |                                              | 31500                               | 3220                                  | 1.60        | 40 -                    | 6195        | - 21            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 62700                               | 6390                                  | 1.97        |                                           |                                            |                                              | 59300                               | 6050                                  | 1.97        | 40 -                    | 6205        | - 21            | B-105                   | B-121        | B-140        |
|                                           |                                            |                                              | 64100                               | 6530                                  | 2.51        |                                           |                                            |                                              | 60700                               | 6180                                  | 2.51        | 40 -                    | 6215        | - 21            | B-105                   | B-121        | B-140        |
|                                           |                                            |                                              | <b>24400</b>                        | <b>2490</b>                           | <b>1.00</b> |                                           |                                            |                                              | <b>23100</b>                        | <b>2360</b>                           | <b>1.00</b> | 40 -                    | <b>6185</b> | - 25            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
| 58.0                                      | 4690                                       | 478                                          | 34900                               | 3560                                  | 1.17        | 70.0                                      | 3890                                       | 396                                          | 32900                               | 3360                                  | 1.17        | 40 -                    | 6190        | - 25            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 34900                               | 3560                                  | 1.35        |                                           |                                            |                                              | 32900                               | 3360                                  | 1.35        | 40 -                    | 6195        | - 25            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 25300                               | 2580                                  | 0.80        |                                           |                                            |                                              | 24000                               | 2450                                  | 0.80        | 40 -                    | 6185        | - 29            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | <b>36600</b>                        | <b>3730</b>                           | <b>1.02</b> |                                           |                                            |                                              | <b>34500</b>                        | <b>3520</b>                           | <b>1.02</b> | 40 -                    | <b>6190</b> | - 29            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
|                                           |                                            |                                              | 36600                               | 3730                                  | 1.26        |                                           |                                            |                                              | 34500                               | 3520                                  | 1.26        | 40 -                    | 6195        | - 29            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 68200                               | 6950                                  | 1.52        |                                           |                                            |                                              | 64600                               | 6590                                  | 1.52        | 40 -                    | 6205        | - 29            | B-105                   | B-121        | B-140        |
| 50.0                                      | 5440                                       | 555                                          | 69600                               | 7090                                  | 1.95        | 60.3                                      | 4510                                       | 460                                          | 65900                               | 6720                                  | 1.95        | 40 -                    | 6215        | - 29            | B-105                   | B-121        | B-140        |
|                                           |                                            |                                              | 73700                               | 7520                                  | 2.51        |                                           |                                            |                                              | 69800                               | 7120                                  | 2.51        | 40 -                    | 6225        | - 29            | B-106                   | B-122        | B-141        |
|                                           |                                            |                                              | <b>37700</b>                        | <b>3850</b>                           | <b>1.09</b> |                                           |                                            |                                              | <b>35800</b>                        | <b>3650</b>                           | <b>1.30</b> | 406 -                   | <b>6190</b> | - 21            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
|                                           |                                            |                                              | 37700                               | 3850                                  | 1.36        |                                           |                                            |                                              | 35800                               | 3650                                  | 1.60        | 406 -                   | 6195        | - 21            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | 71700                               | 7310                                  | 2.14        |                                           |                                            |                                              | 68200                               | 6960                                  | 2.51        | 406 -                   | 6215        | - 21            | B-105                   | B-121        | B-140        |
|                                           |                                            |                                              | <b>38400</b>                        | <b>3920</b>                           | <b>1.00</b> |                                           |                                            |                                              | <b>36300</b>                        | <b>3700</b>                           | <b>1.00</b> | 40 -                    | <b>6195</b> | - 35            | <b>B-104</b>            | <b>B-120</b> | <b>B-139</b> |
| 41.4                                      | 6570                                       | 670                                          | 76300                               | 7770                                  | 1.15        | 50.0                                      | 5440                                       | 555                                          | 72600                               | 7400                                  | 1.32        | 406 -                   | 6205        | - 29            | B-105                   | B-121        | B-140        |
|                                           |                                            |                                              | 77800                               | 7930                                  | 1.57        |                                           |                                            |                                              | 74100                               | 7550                                  | 1.87        | 406 -                   | 6215        | - 29            | B-105                   | B-121        | B-140        |
|                                           |                                            |                                              | 82500                               | 8410                                  | 1.87        |                                           |                                            |                                              | 78500                               | 8000                                  | 2.22        | 406 -                   | 6225        | - 29            | B-106                   | B-122        | B-141        |
|                                           |                                            |                                              | 41100                               | 4190                                  | 0.90        |                                           |                                            |                                              | 38900                               | 3970                                  | 1.00        | 40 -                    | 6195        | - 43            | B-104                   | B-120        | B-139        |
|                                           |                                            |                                              | <b>76600</b>                        | <b>7810</b>                           | <b>1.06</b> |                                           |                                            |                                              | <b>72600</b>                        | <b>7400</b>                           | <b>1.06</b> | 40 -                    | <b>6205</b> | - 43            | <b>B-105</b>            | <b>B-121</b> | <b>B-140</b> |
|                                           |                                            |                                              | 78200                               | 7970                                  | 1.51        |                                           |                                            |                                              | 74100                               | 7560                                  | 1.51        | 40 -                    | 6215        | - 43            | B-105                   | B-121        | B-140        |
| 33.8                                      | 8050                                       | 821                                          | 83000                               | 8460                                  | 1.88        | 40.7                                      | 6690                                       | 682                                          | 78600                               | 8010                                  | 1.88        | 40 -                    | 6225        | - 43            | B-106                   | B-122        | B-141        |
|                                           |                                            |                                              | <b>84600</b>                        | <b>8620</b>                           | <b>1.13</b> |                                           |                                            |                                              | <b>80300</b>                        | <b>8180</b>                           | <b>1.26</b> | 40 -                    | <b>6215</b> | - 59            | <b>B-105</b>            | <b>B-121</b> | <b>B-140</b> |
|                                           |                                            |                                              | 89800                               | 9150                                  | 1.31        |                                           |                                            |                                              | 85200                               | 8680                                  | 1.51        | 40 -                    | 6225        | - 59            | B-106                   | B-122        | B-141        |
|                                           |                                            |                                              | <b>87200</b>                        | <b>8890</b>                           | <b>1.06</b> |                                           |                                            |                                              | <b>83100</b>                        | <b>8480</b>                           | <b>1.26</b> | 406 -                   | <b>6215</b> | - 43            | <b>B-105</b>            | <b>B-121</b> | <b>B-140</b> |
|                                           |                                            |                                              | 92600                               | 9440                                  | 1.34        |                                           |                                            |                                              | 88300                               | 9000                                  | 1.59        | 406 -                   | 6225        | - 43            | B-106                   | B-122        | B-141        |
|                                           |                                            |                                              | 129000                              | 13200                                 | 2.16        |                                           |                                            |                                              | 123000                              | 12500                                 | 2.51        | 406 -                   | 6245        | - 43            | B-107                   | B-123        | B-142        |

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

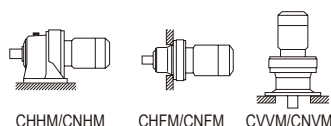
## Selection Tables Gearmotors

| 30 kW          |  | n <sub>1</sub> : Motor Speed |  |      |  |     |  |      |  |      |  |  |  |  |  |  |  |  |  |  |
|----------------|--|------------------------------|--|------|--|-----|--|------|--|------|--|-------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------|--|--|
|                |  | Hz                           |  | 50Hz |  |     |  | 60Hz |  |      |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |
|                |  | P                            |  | 4    |  | 6   |  | 4    |  | 6    |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |
| n <sub>1</sub> |  | r/min                        |  | 1450 |  | 980 |  | 1750 |  | 1165 |  |                                                                                     |  |  |                                                                                     |  |  |                                                                                     |  |  |

| 50Hz                           |                                   |                              |        |       |        | 60Hz                           |                                   |                              |        |       |       | Nomenclature            |            |                 | Page of Dimension Sheet |       |        |
|--------------------------------|-----------------------------------|------------------------------|--------|-------|--------|--------------------------------|-----------------------------------|------------------------------|--------|-------|-------|-------------------------|------------|-----------------|-------------------------|-------|--------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    |        | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    |       | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVM   |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |        | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |       |                         |            |                 | CHHM                    | CHFM  | CVVM   |
| 16.6                           | 16400                             | 1670                         | 125000 | 12800 | 1.15   | 19.7                           | 13800                             | 1410                         | 119000 | 12200 | 1.26  | 406 -                   | 6235       | - 59            | B-106                   | B-122 | B-141  |
|                                |                                   |                              | 140000 | 14300 | 1.57   |                                |                                   |                              | 134000 | 13600 | 1.87  | 406 -                   | 6245       | - 59            | B-107                   | B-123 | B-142  |
|                                |                                   |                              | 173000 | 17600 | 1.89   |                                |                                   |                              | 164000 | 16800 | 2.16  | 406 -                   | 6255       | - 59            | B-107                   | B-123 | B-142  |
| 12.0                           | 21500                             | 2190                         | 13500  | 1370  | *      | 14.5                           | 17800                             | 1820                         | 106000 | 10800 | *     | 40 -                    | 6225DB     | - 121           | B-113                   | B-130 | B-149  |
|                                |                                   |                              | 140000 | 14300 | 0.87   |                                |                                   |                              | 133000 | 13500 | 1.05  | 40 -                    | 6235DB     | - 121           | B-114                   | B-131 | B-150  |
|                                |                                   |                              | 156000 | 15900 | 0.95   |                                |                                   |                              | 148000 | 15100 | 1.15  | 40 -                    | 6245DB     | - 121           | B-114                   | B-131 | B-150  |
|                                |                                   |                              | 192000 | 19600 | 1.01   |                                |                                   |                              | 182000 | 18600 | 1.01  | 40 -                    | 6255DA     | - 121           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 192000 | 19600 | 1.28   |                                |                                   |                              | 182000 | 18600 | 1.54  | 40 -                    | 6255DB     | - 121           | B-115                   | B-132 | B-151  |
| 11.3                           | 24200                             | 2460                         | 236000 | 24000 | 1.46   | 13.4                           | 20300                             | 2070                         | 223000 | 22700 | 1.61  | 40 -                    | 6265DA     | - 121           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 193000 | 19700 | 1.28   |                                |                                   |                              | 184000 | 18800 | 1.43  | 406 -                   | 6255       | - 87            | B-107                   | B-123 | B-142  |
|                                |                                   |                              | 236000 | 24100 | 1.78   |                                |                                   |                              | 225000 | 22900 | 1.78  | 406 -                   | 6265       | - 87            | B-107                   | B-123 | B-142  |
|                                |                                   |                              | 19600  | 2000  | *      |                                |                                   |                              | 143000 | 14500 | *     | 40 -                    | 6235DB     | - 165           | B-114                   | B-131 | B-150  |
|                                |                                   |                              | 167000 | 17000 | 0.89   |                                |                                   |                              | 159000 | 16200 | 1.08  | 40 -                    | 6245DB     | - 165           | B-114                   | B-131 | B-150  |
| 8.79                           | 29300                             | 2990                         | 206000 | 21000 | 1.01   | 10.6                           | 24300                             | 2480                         | 195000 | 19900 | 1.01  | 40 -                    | 6255DA     | - 165           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 206000 | 21000 | 1.06   |                                |                                   |                              | 195000 | 19900 | 1.28  | 40 -                    | 6255DB     | - 165           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 252000 | 25700 | 1.49   |                                |                                   |                              | 239000 | 24300 | 1.61  | 40 -                    | 6265DA     | - 165           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 26200  | 2680  | *      |                                |                                   |                              | 262000 | 26800 | *     | 40 -                    | 6245DB     | - 195           | B-114                   | B-131 | B-150  |
| 7.44                           | 34700                             | 3530                         | 216000 | 22000 | 0.90   | 8.97                           | 28700                             | 2930                         | 205000 | 20900 | 1.01  | 40 -                    | 6255DA     | - 195           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 216000 | 22000 | 0.90   |                                |                                   |                              | 205000 | 20900 | 1.08  | 40 -                    | 6255DB     | - 195           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 265000 | 27000 | 1.26   |                                |                                   |                              | 251000 | 25600 | 1.52  | 40 -                    | 6265DA     | - 195           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 25800  | 2630  | *      |                                |                                   |                              | 258000 | 26300 | *     | 40 -                    | 6245DB     | - 231           | B-114                   | B-131 | B-150  |
| 6.28                           | 31000                             | 3160                         | 231000 | 23500 | *      | 7.58                           | 31000                             | 3160                         | 218000 | 22200 | *     | 40 -                    | 6255DA     | - 231           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 41100  | 4190  | 1.12   |                                |                                   |                              | 34000  | 3470  | 1.35  | 40 -                    | 6265DA     | - 231           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 31000  | 3160  | *      |                                |                                   |                              | 31000  | 3160  | *     | 40 -                    | 6255DA     | - 273           | B-115                   | B-132 | B-151  |
| 5.31                           | 48500                             | 4950                         | 276000 | 28100 | 0.95   | 6.41                           | 40200                             | 4100                         | 276000 | 28100 | 1.14  | 40 -                    | 6265DA     | - 273           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 46000  | 4690  | *      |                                |                                   |                              | 46000  | 4690  | *     | 40 -                    | 6265DA     | - 319           | B-115                   | B-132 | B-151  |
| 4.55                           | 56700                             | 5780                         | 276000 | 28100 | *      | 5.49                           | 47000                             | 4790                         | 276000 | 28100 | 0.98  | 40 -                    | 6265DA     | - 319           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 276000 | 28100 | 0.81   |                                |                                   |                              | 276000 | 28100 | 0.98  | 40 -                    | 6265DA     | - 319           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 248000 | 25300 | 1.20   |                                |                                   |                              | 248000 | 25300 | 1.45  | 40 -                    | 6275DA     | - 319           | B-115                   | -     | B-151  |
| 3.85                           | 46000                             | 4690                         | 276000 | 28100 | *      | 4.64                           | 46000                             | 4690                         | 276000 | 28100 | *     | 40 -                    | 6265DA     | - 377           | B-115                   | B-132 | B-151  |
|                                |                                   |                              | 67000  | 6830  | 248000 |                                |                                   |                              | 25300  | 1.02  | 55500 | 5660                    | 248000     | 25300           | 1.23                    | 40 -  | 6275DA |
| 3.07                           | 68200                             | 6950                         | 248000 | 25300 | *      | 3.70                           | 68200                             | 6950                         | 248000 | 25300 | *     | 40 -                    | 6275DA     | - 473           | B-115                   | -     | B-151  |
|                                |                                   |                              | 84100  | 8570  | 248000 |                                |                                   |                              | 25300  | 0.81  | 69700 | 7100                    | 248000     | 25300           | 0.98                    | 40 -  | 6275DA |
| 2.59                           | 68200                             | 6950                         | 248000 | 25300 | *      | 3.13                           | 68200                             | 6950                         | 248000 | 25300 | *     | 40                      | 6275DA     | - 559           | B-115                   | -     | B-151  |

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors



|       |                |       |      |     |      |      |
|-------|----------------|-------|------|-----|------|------|
| 37 kW | Hz             |       | 50Hz |     | 60Hz |      |
|       | P              |       | 4    | 6   | 4    | 6    |
|       | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

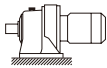
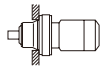
| 50Hz                                      |                                |                                  |                                     |                                       |      | 60Hz                                      |                                |                                  |                                     |                                       |      | Nomenclature            |            |                 | Page of Dimension Sheet |       |       |
|-------------------------------------------|--------------------------------|----------------------------------|-------------------------------------|---------------------------------------|------|-------------------------------------------|--------------------------------|----------------------------------|-------------------------------------|---------------------------------------|------|-------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] | Output Torque<br>Tout<br>[kgf·m] | Allowable Radial Load<br>Pro<br>[N] | Allowable Radial Load<br>Pro<br>[kgf] | SF   | Output Speed<br>n <sub>2</sub><br>[r/min] | Output Torque<br>Tout<br>[N·m] | Output Torque<br>Tout<br>[kgf·m] | Allowable Radial Load<br>Pro<br>[N] | Allowable Radial Load<br>Pro<br>[kgf] | SF   | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVN  |
| 132                                       | 2550                           | 260                              | 19000                               | 1940                                  | 1.05 | 159                                       | 2110                           | 215                              | 18000                               | 1830                                  | 1.05 | 50 -                    | 6185       | - 11            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 27000                               | 2750                                  | 1.11 |                                           |                                |                                  | 25400                               | 2590                                  | 1.11 | 50 -                    | 6190       | - 11            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 27000                               | 2750                                  | 1.30 |                                           |                                |                                  | 25400                               | 2590                                  | 1.30 | 50 -                    | 6195       | - 11            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 52000                               | 5310                                  | 1.61 |                                           |                                |                                  | 49300                               | 5020                                  | 1.61 | 50 -                    | 6205       | - 11            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 52700                               | 5380                                  | 2.04 |                                           |                                |                                  | 49900                               | 5090                                  | 2.04 | 50 -                    | 6215       | - 11            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 56000                               | 5700                                  | 2.69 |                                           |                                |                                  | 53000                               | 5400                                  | 2.69 | 50 -                    | 6225       | - 11            | B-106                   | B-122 | B-141 |
| 112                                       | 3010                           | 307                              | 19700                               | 2010                                  | 1.05 | 135                                       | 2490                           | 254                              | 18600                               | 1900                                  | 1.05 | 50 -                    | 6185       | - 13            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 28000                               | 2850                                  | 1.11 |                                           |                                |                                  | 26400                               | 2690                                  | 1.11 | 50 -                    | 6190       | - 13            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 28000                               | 2850                                  | 1.30 |                                           |                                |                                  | 26400                               | 2690                                  | 1.30 | 50 -                    | 6195       | - 13            | B-104                   | B-120 | B-139 |
| 96.7                                      | 3470                           | 354                              | 20600                               | 2100                                  | 1.05 | 117                                       | 2880                           | 293                              | 19500                               | 1990                                  | 1.05 | 50 -                    | 6185       | - 15            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 29300                               | 2990                                  | 1.11 |                                           |                                |                                  | 27700                               | 2820                                  | 1.11 | 50 -                    | 6190       | - 15            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 29300                               | 2990                                  | 1.30 |                                           |                                |                                  | 27700                               | 2820                                  | 1.30 | 50 -                    | 6195       | - 15            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 55900                               | 5700                                  | 1.61 |                                           |                                |                                  | 52900                               | 5390                                  | 1.61 | 50 -                    | 6205       | - 15            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 56600                               | 5770                                  | 2.04 |                                           |                                |                                  | 53600                               | 5470                                  | 2.04 | 50 -                    | 6215       | - 15            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 60400                               | 6160                                  | 2.69 |                                           |                                |                                  | 57200                               | 5830                                  | 2.69 | 50 -                    | 6225       | - 15            | B-106                   | B-122 | B-141 |
| 85.3                                      | 3940                           | 401                              | 21600                               | 2210                                  | 1.03 | 103                                       | 3260                           | 332                              | 20500                               | 2090                                  | 1.05 | 50 -                    | 6185       | - 17            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 30900                               | 3150                                  | 1.11 |                                           |                                |                                  | 29100                               | 2970                                  | 1.11 | 50 -                    | 6190       | - 17            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 30900                               | 3150                                  | 1.30 |                                           |                                |                                  | 29100                               | 2970                                  | 1.30 | 50 -                    | 6195       | - 17            | B-104                   | B-120 | B-139 |
| 69.0                                      | 4860                           | 496                              | 23300                               | 2370                                  | 1.03 | 83.3                                      | 4030                           | 411                              | 22100                               | 2250                                  | 1.05 | 50 -                    | 6185       | - 21            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 33200                               | 3380                                  | 1.11 |                                           |                                |                                  | 31300                               | 3190                                  | 1.11 | 50 -                    | 6190       | - 21            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 33200                               | 3380                                  | 1.30 |                                           |                                |                                  | 31300                               | 3190                                  | 1.30 | 50 -                    | 6195       | - 21            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 62500                               | 6370                                  | 1.60 |                                           |                                |                                  | 59200                               | 6030                                  | 1.60 | 50 -                    | 6205       | - 21            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 63800                               | 6510                                  | 2.04 |                                           |                                |                                  | 60500                               | 6170                                  | 2.04 | 50 -                    | 6215       | - 21            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 67500                               | 6880                                  | 2.55 |                                           |                                |                                  | 63900                               | 6510                                  | 2.55 | 50 -                    | 6225       | - 21            | B-106                   | B-122 | B-141 |
| 65.3                                      | 5140                           | 524                              | 32900                               | 3360                                  | 1.11 | 77.7                                      | 4320                           | 441                              | 31300                               | 3190                                  | 1.11 | 506 -                   | 6190       | - 15            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 32900                               | 3360                                  | 1.30 |                                           |                                |                                  | 31300                               | 3190                                  | 1.30 | 506 -                   | 6195       | - 15            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 62600                               | 6380                                  | 1.61 |                                           |                                |                                  | 59500                               | 6070                                  | 1.61 | 506 -                   | 6205       | - 15            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 63400                               | 6460                                  | 2.04 |                                           |                                |                                  | 60300                               | 6150                                  | 2.04 | 506 -                   | 6215       | - 15            | B-105                   | B-121 | B-140 |
| 58.0                                      | 5790                           | 590                              | 23900                               | 2440                                  | 0.81 | 70.0                                      | 4800                           | 489                              | 22700                               | 2320                                  | 0.81 | 50 -                    | 6185       | - 25            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 34600                               | 3530                                  | 0.95 |                                           |                                |                                  | 32700                               | 3330                                  | 0.95 | 50 -                    | 6190       | - 25            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 34600                               | 3530                                  | 1.09 |                                           |                                |                                  | 32700                               | 3330                                  | 1.09 | 50 -                    | 6195       | - 25            | B-104                   | B-120 | B-139 |
| 50.0                                      | 6710                           | 684                              | 36200                               | 3690                                  | 1.02 | 60.3                                      | 5560                           | 567                              | 34200                               | 3490                                  | 1.02 | 50 -                    | 6195       | - 29            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 67900                               | 6920                                  | 1.24 |                                           |                                |                                  | 64400                               | 6560                                  | 1.24 | 50 -                    | 6205       | - 29            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 69300                               | 7060                                  | 1.58 |                                           |                                |                                  | 65700                               | 6700                                  | 1.58 | 50 -                    | 6215       | - 29            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 73400                               | 7490                                  | 2.04 |                                           |                                |                                  | 69600                               | 7090                                  | 2.04 | 50 -                    | 6225       | - 29            | B-106                   | B-122 | B-141 |
|                                           |                                |                                  | 77300                               | 7880                                  | 2.27 |                                           |                                |                                  | 73700                               | 7510                                  | 1.51 | 506 -                   | 6215       | - 29            | B-105                   | B-121 | B-140 |
| 46.7                                      | 7190                           | 733                              | 37300                               | 3800                                  | 1.11 | 55.5                                      | 6050                           | 617                              | 35500                               | 3610                                  | 1.30 | 506 -                   | 6195       | - 21            | B-104                   | B-120 | B-139 |
|                                           |                                |                                  | 71400                               | 7280                                  | 1.74 |                                           |                                |                                  | 68000                               | 6930                                  | 2.04 | 506 -                   | 6215       | - 21            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 75500                               | 7690                                  | 2.06 |                                           |                                |                                  | 71800                               | 7320                                  | 2.45 | 506 -                   | 6225       | - 21            | B-106                   | B-122 | B-141 |
| 41.4                                      | 8100                           | 826                              | 38000                               | 3870                                  | 0.81 | 50.0                                      | 6710                           | 684                              | 35900                               | 3660                                  | 0.81 | 50 -                    | 6195       | - 35            | B-104                   | B-120 | B-139 |
| 33.8                                      | 9930                           | 1010                             | 77300                               | 7880                                  | 1.27 | 40.2                                      | 8360                           | 852                              | 73700                               | 7510                                  | 1.51 | 506 -                   | 6215       | - 29            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 82000                               | 8360                                  | 1.51 |                                           |                                |                                  | 78100                               | 7970                                  | 1.80 | 506 -                   | 6225       | - 29            | B-106                   | B-122 | B-141 |
|                                           |                                |                                  | 103000                              | 10500                                 | 1.90 |                                           |                                |                                  | 97900                               | 9980                                  | 2.04 | 506 -                   | 6235       | - 29            | B-106                   | B-122 | B-141 |
| 33.7                                      | 9950                           | 1010                             | 77700                               | 7920                                  | 1.22 | 40.7                                      | 8250                           | 841                              | 73800                               | 7520                                  | 1.22 | 50 -                    | 6215       | - 43            | B-105                   | B-121 | B-140 |
|                                           |                                |                                  | 82500                               | 8410                                  | 1.53 |                                           |                                |                                  | 78300                               | 7980                                  | 1.53 | 50 -                    | 6225       | - 43            | B-106                   | B-122 | B-141 |
| 24.6                                      | 13700                          | 1390                             | 89200                               | 9090                                  | 1.06 | 29.7                                      | 11300                          | 1150                             | 84700                               | 8630                                  | 1.22 | 50 -                    | 6225       | - 59            | B-106                   | B-122 | B-141 |
| 22.8                                      | 14700                          | 1500                             | 129000                              | 13100                                 | 1.75 | 27.1                                      | 12400                          | 1260                             | 122000                              | 12500                                 | 2.04 | 506 -                   | 6245       | - 43            | B-107                   | B-123 | B-142 |
| 16.6                                      | 20200                          | 2060                             | 140000                              | 14200                                 | 1.28 | 19.7                                      | 17000                          | 1730                             | 133000                              | 13500                                 | 1.52 | 506 -                   | 6245       | - 59            | B-107                   | B-123 | B-142 |
|                                           |                                |                                  | 172000                              | 17600                                 | 1.54 |                                           |                                |                                  | 164000                              | 16700                                 | 1.75 | 506 -                   | 6255       | - 59            | B-107                   | B-123 | B-142 |
|                                           |                                |                                  | 211000                              | 21500                                 | 2.28 |                                           |                                |                                  | 201000                              | 20500                                 | 2.55 | 506 -                   | 6265       | - 59            | B-107                   | B-123 | B-142 |

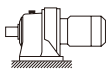
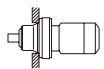
GEARMOTORS

Selection Tables  
37 kW

- "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

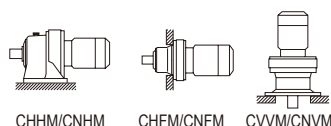
## Selection Tables Gearmotors

| 37 kW                          |                                   | n <sub>1</sub> : Motor Speed |               |              |                                |                                   |                              |  |               |                            |  |                    |              |  |                         |              |       |
|--------------------------------|-----------------------------------|------------------------------|---------------|--------------|--------------------------------|-----------------------------------|------------------------------|-------------------------------------------------------------------------------------|---------------|----------------------------|-------------------------------------------------------------------------------------|--------------------|--------------|-------------------------------------------------------------------------------------|-------------------------|--------------|-------|
|                                |                                   | Hz                           |               | 50Hz         |                                | 60Hz                              |                              |                                                                                     |               |                            |                                                                                     |                    |              |                                                                                     |                         |              |       |
|                                |                                   | P                            |               | 4            | 6                              | 4                                 | 6                            |                                                                                     |               |                            |                                                                                     |                    |              |                                                                                     |                         |              |       |
|                                |                                   | n <sub>1</sub>               | r/min         | 1450         | 980                            | 1750                              | 1165                         |                                                                                     |               |                            |                                                                                     |                    |              |                                                                                     |                         |              |       |
| 50Hz                           |                                   |                              |               |              |                                | 60Hz                              |                              |                                                                                     |               |                            |                                                                                     | Nomenclature       |              |                                                                                     | Page of Dimension Sheet |              |       |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |               | SF           | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |                                                                                     | SF            | Input Capacity -<br>Symbol | Frame Size                                                                          | Reduction Ratio    | CNHM         | CNFM                                                                                | CNVV                    |              |       |
| [r/min]                        | [N·m] [kgf·m]                     | [N] [kgf]                    | [r/min]       |              | [N·m] [kgf·m]                  | [N] [kgf]                         | [r/min]                      | [N·m] [kgf·m]                                                                       |               | [N] [kgf]                  |                                                                                     |                    |              | CHHM                                                                                | CHFM                    | CVVM         |       |
| 12.0                           | 18700                             | 1910                         | 141000        | 14300        | *                              | 14.5                              | 18700                        | 1910                                                                                | 133000        | 13500                      | *                                                                                   | 50 -               | 6235DB       | - 121                                                                               | B-114                   | B-131        | B-150 |
|                                | 20500                             | 2090                         | 156000        | 15900        | *                              |                                   | 20500                        | 2090                                                                                | 148000        | 15000                      | *                                                                                   | 50 -               | 6245DB       | - 121                                                                               | B-114                   | B-131        | B-150 |
|                                | 26500                             | 2710                         | <b>191000</b> | <b>19500</b> | <b>1.04</b>                    |                                   | 22000                        | 2240                                                                                | <b>181000</b> | <b>18500</b>               | <b>1.25</b>                                                                         | <b>50 - 6255DB</b> | <b>- 121</b> | <b>B-115</b>                                                                        | <b>B-132</b>            | <b>B-151</b> |       |
| 11.3                           | 29800                             | 3040                         | 235000        | 23900        | 1.18                           | 13.4                              | 25100                        | 2560                                                                                | 222000        | 22700                      | 1.37                                                                                | 50 -               | 6265DA       | - 121                                                                               | B-115                   | B-132        | B-151 |
|                                |                                   |                              | <b>192000</b> | <b>19600</b> | <b>1.04</b>                    |                                   |                              |                                                                                     | <b>183000</b> | <b>18700</b>               | <b>1.16</b>                                                                         | <b>506 - 6255</b>  | <b>- 87</b>  | <b>B-107</b>                                                                        | <b>B-123</b>            | <b>B-142</b> |       |
|                                |                                   |                              | 236000        | 24000        | 1.44                           |                                   |                              |                                                                                     | 224000        | 22900                      | 1.44                                                                                | 506 -              | 6265         | - 87                                                                                | B-107                   | B-123        | B-142 |
| 8.79                           | 26200                             | 2680                         | 168000        | 17100        | *                              | 10.6                              | 26200                        | 2680                                                                                | 158000        | 16100                      | *                                                                                   | 50 -               | 6245DB       | - 165                                                                               | B-114                   | B-131        | B-150 |
|                                | 36200                             | 3690                         | 205000        | 20900        | 0.86                           |                                   | 30000                        | 3060                                                                                | 194000        | 19800                      | 1.04                                                                                | 50 -               | 6255DB       | - 165                                                                               | B-115                   | B-132        | B-151 |
|                                |                                   |                              | 251000        | 25600        | 1.21                           |                                   |                              |                                                                                     | 238000        | 24300                      | 1.30                                                                                | 50 -               | 6265DA       | - 165                                                                               | B-115                   | B-132        | B-151 |
| 7.44                           | 31200                             | 3180                         | 216000        | 22100        | *                              | 8.97                              | 31200                        | 3180                                                                                | 204000        | 20800                      | *                                                                                   | 50 -               | 6255DB       | - 195                                                                               | B-115                   | B-132        | B-151 |
|                                | 42800                             | 4360                         | <b>263000</b> | <b>26800</b> | <b>1.02</b>                    |                                   | <b>35400</b>                 | <b>3610</b>                                                                         | <b>250000</b> | <b>25400</b>               | <b>1.23</b>                                                                         | <b>50 - 6265DA</b> | <b>- 195</b> | <b>B-115</b>                                                                        | <b>B-132</b>            | <b>B-151</b> |       |
| 6.28                           | 50700                             | 5160                         | 276000        | 28100        | 0.91                           | 7.58                              | 42000                        | 4280                                                                                | 266000        | 27100                      | 1.10                                                                                | 50 -               | 6265DA       | - 231                                                                               | B-115                   | B-132        | B-151 |
| 5.31                           | 46000                             | 4690                         | 276000        | 28100        | *                              | 6.41                              | 46000                        | 4690                                                                                | 276000        | 28100                      | *                                                                                   | 50 -               | 6265DA       | - 273                                                                               | B-115                   | B-132        | B-151 |
| 4.55                           | 70000                             | 7130                         | 248000        | 25300        | 0.97                           | 5.49                              | 58000                        | 5910                                                                                | 248000        | 25300                      | 1.18                                                                                | 50 -               | 6275DA       | - 319                                                                               | B-115                   | -            | B-151 |
| 3.85                           | 68200                             | 6950                         | 248000        | 25300        | *                              | 4.64                              | 68200                        | 6950                                                                                | 248000        | 25300                      | *                                                                                   | 50 -               | 6275DA       | - 377                                                                               | B-115                   | -            | B-151 |
|                                | 82700                             | 8430                         | 248000        | 25300        | 0.82                           |                                   | 68500                        | 6980                                                                                | 248000        | 25300                      | 1.00                                                                                | 50 -               | 6275DA       | - 377                                                                               | B-115                   | -            | B-151 |

| 45 kW                          |                                   | n <sub>1</sub> : Motor Speed |       |      |                                |                                   |                              |  |       |                            |  |                 |       |  |                         |       |       |       |       |
|--------------------------------|-----------------------------------|------------------------------|-------|------|--------------------------------|-----------------------------------|------------------------------|---------------------------------------------------------------------------------------|-------|----------------------------|---------------------------------------------------------------------------------------|-----------------|-------|---------------------------------------------------------------------------------------|-------------------------|-------|-------|-------|-------|
|                                |                                   | Hz                           |       | 50Hz |                                | 60Hz                              |                              | <div>CHHM/CNHM</div> <div>CHFM/CNFM</div> <div>CVVM/CNVVM</div>                       |       |                            |                                                                                       |                 |       |                                                                                       |                         |       |       |       |       |
|                                |                                   | P                            |       | 4    | 6                              | 4                                 | 6                            |                                                                                       |       |                            |                                                                                       |                 |       |                                                                                       |                         |       |       |       |       |
|                                |                                   | n <sub>1</sub>               | r/min | 1450 | 980                            | 1750                              | 1165                         |                                                                                       |       |                            |                                                                                       |                 |       |                                                                                       |                         |       |       |       |       |
| 50Hz                           |                                   |                              |       |      |                                | 60Hz                              |                              |                                                                                       |       |                            |                                                                                       | Nomenclature    |       |                                                                                       | Page of Dimension Sheet |       |       |       |       |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |       | SF   | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |                                                                                       | SF    | Input Capacity -<br>Symbol | Frame Size                                                                            | Reduction Ratio | CNHM  | CNFM                                                                                  | CNVVM                   |       |       |       |       |
| [r/min]                        | [N·m] [kgf·m]                     | [N]                          | [kgf] |      | [r/min]                        | [N·m] [kgf·m]                     | [N]                          | [kgf]                                                                                 |       | 60 -                       | 6195                                                                                  | - 11            | B-104 | B-120                                                                                 | B-139                   |       |       |       |       |
| 132                            | 3100                              | 316                          | 26800 | 2730 | 159                            | 2570                              | 262                          | 25300                                                                                 | 2570  | 60 -                       | 6195                                                                                  | - 11            | B-104 | B-120                                                                                 | B-139                   |       |       |       |       |
|                                |                                   |                              | 51900 | 5290 |                                |                                   |                              | 49200                                                                                 | 5010  |                            |                                                                                       |                 |       |                                                                                       |                         | 6205  | B-105 | B-121 | B-140 |
|                                |                                   |                              | 52600 | 5360 |                                |                                   |                              | 49800                                                                                 | 5080  |                            |                                                                                       |                 |       |                                                                                       |                         | 6215  | B-105 | B-121 | B-140 |
|                                |                                   |                              | 55800 | 5690 |                                |                                   |                              | 52800                                                                                 | 5390  |                            |                                                                                       |                 |       |                                                                                       |                         | 6225  | B-106 | B-122 | B-141 |
| 112                            | 3660                              | 373                          | 27700 | 2830 | 1.07                           | 135                               | 3030                         | 309                                                                                   | 26200 | 2670                       | 1.07                                                                                  | 60 -            | 6195  | - 13                                                                                  | B-104                   | B-120 | B-139 |       |       |
| 96.7                           | 4220                              | 431                          | 29000 | 2960 | 1.07                           | 117                               | 3500                         | 357                                                                                   | 27400 | 2800                       | 1.07                                                                                  | 60 -            | 6195  | - 15                                                                                  | B-104                   | B-120 | B-139 |       |       |
|                                |                                   |                              | 55700 | 5680 | 52800                          |                                   |                              |                                                                                       | 5380  | 1.33                       | 60 -                                                                                  | 6205            | - 15  | B-105                                                                                 | B-121                   | B-140 |       |       |       |
|                                |                                   |                              | 56500 | 5750 | 53500                          |                                   |                              |                                                                                       | 5450  | 1.67                       | 60 -                                                                                  | 6215            | - 15  | B-105                                                                                 | B-121                   | B-140 |       |       |       |
|                                |                                   |                              | 60200 | 6140 | 57000                          |                                   |                              |                                                                                       | 5820  | 2.21                       | 60 -                                                                                  | 6225            | - 15  | B-106                                                                                 | B-122                   | B-141 |       |       |       |
| 85.3                           | 4790                              | 488                          | 21200 | 2160 | 0.85                           | 103                               | 3970                         | 404                                                                                   | 20200 | 2060                       | 0.87                                                                                  | 60 -            | 6185  | - 17                                                                                  | B-104                   | B-120 | B-139 |       |       |
|                                |                                   |                              | 30600 | 3120 | 1.07                           |                                   |                              |                                                                                       | 28900 | 2950                       | 1.07                                                                                  | 60 -            | 6195  | - 17                                                                                  | B-104                   | B-120 | B-139 |       |       |
| 69.0                           | 5910                              | 603                          | 22800 | 2330 | 0.85                           | 83.3                              | 4900                         | 499                                                                                   | 21700 | 2210                       | 0.87                                                                                  | 60 -            | 6185  | - 21                                                                                  | B-104                   | B-120 | B-139 |       |       |
|                                |                                   |                              | 32900 | 3350 | 0.91                           |                                   |                              |                                                                                       | 31100 | 3170                       | 0.91                                                                                  | 60 -            | 6190  | - 21                                                                                  | B-104                   | B-120 | B-139 |       |       |
|                                |                                   |                              | 32900 | 3350 | 1.07                           |                                   |                              |                                                                                       | 31100 | 3170                       | 1.07                                                                                  | 60 -            | 6195  | - 21                                                                                  | B-104                   | B-120 | B-139 |       |       |
|                                |                                   |                              | 62200 | 6340 | 1.32                           |                                   |                              |                                                                                       | 59000 | 6010                       | 1.32                                                                                  | 60 -            | 6205  | - 21                                                                                  | B-105                   | B-121 | B-140 |       |       |
|                                |                                   |                              | 63600 | 6480 | 1.67                           |                                   |                              |                                                                                       | 60300 | 6140                       | 1.67                                                                                  | 60 -            | 6215  | - 21                                                                                  | B-105                   | B-121 | B-140 |       |       |
|                                |                                   |                              | 67200 | 6850 | 2.09                           |                                   |                              |                                                                                       | 63700 | 6490                       | 2.09                                                                                  | 60 -            | 6225  | - 21                                                                                  | B-106                   | B-122 | B-141 |       |       |
| 65.3                           | 6250                              | 637                          | 62300 | 6350 | 1.33                           | 77.7                              | 5260                         | 536                                                                                   | 59300 | 6050                       | 1.33                                                                                  | 606 -           | 6205  | - 15                                                                                  | B-105                   | B-121 | B-140 |       |       |
|                                |                                   |                              | 63100 | 6430 | 1.67                           |                                   |                              |                                                                                       | 60100 | 6130                       | 1.67                                                                                  | 606 -           | 6215  | - 15                                                                                  | B-105                   | B-121 | B-140 |       |       |
|                                |                                   |                              | 67400 | 6870 | 2.21                           |                                   |                              |                                                                                       | 64200 | 6540                       | 2.21                                                                                  | 606 -           | 6225  | - 15                                                                                  | B-106                   | B-122 | B-141 |       |       |
| 58.0                           | 7040                              | 718                          | 34200 | 3490 | 0.90                           | 70.0                              | 5830                         | 595                                                                                   | 32400 | 3300                       | 0.90                                                                                  | 60 -            | 6195  | - 25                                                                                  | B-104                   | B-120 | B-139 |       |       |
| 50.0                           | 8170                              | 832                          | 35700 | 3640 | 0.84                           | 60.3                              | 6770                         | 690                                                                                   | 33900 | 3450                       | 0.84                                                                                  | 60 -            | 6195  | - 29                                                                                  | B-104                   | B-120 | B-139 |       |       |
|                                |                                   |                              | 67600 | 6890 | 1.02                           |                                   |                              |                                                                                       | 64100 | 6530                       | 1.02                                                                                  | 60 -            | 6205  | - 29                                                                                  | B-105                   | B-121 | B-140 |       |       |
|                                |                                   |                              | 68900 | 7030 | 1.30                           |                                   |                              |                                                                                       | 65400 | 6660                       | 1.30                                                                                  | 60 -            | 6215  | - 29                                                                                  | B-105                   | B-121 | B-140 |       |       |
|                                |                                   |                              | 73100 | 7450 | 1.67                           |                                   |                              |                                                                                       | 69300 | 7070                       | 1.67                                                                                  | 60 -            | 6225  | - 29                                                                                  | B-106                   | B-122 | B-141 |       |       |

1. Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
2. Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
3. CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
4. Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
5. "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.

## Selection Tables Gearmotors

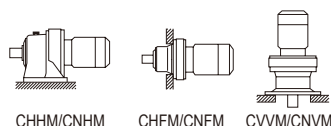


| 45 kW | Hz             |       | 50Hz |     | 60Hz |      |
|-------|----------------|-------|------|-----|------|------|
|       | P              |       | 4    | 6   | 4    | 6    |
|       | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

| 50Hz                           |                       |         |                              |       |      | 60Hz                           |                       |         |                              |       |      | Nomenclature               |            |                 | Page of Dimension Sheet |       |       |
|--------------------------------|-----------------------|---------|------------------------------|-------|------|--------------------------------|-----------------------|---------|------------------------------|-------|------|----------------------------|------------|-----------------|-------------------------|-------|-------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout |         | Allowable Radial Load<br>Pro |       | SF   | Input Capacity -<br>Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM  | CNVM  |
| [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      | [r/min]                        | [N·m]                 | [kgf·m] | [N]                          | [kgf] |      |                            |            |                 | CHHM                    | CHFM  | CVVM  |
| 46.7                           | 8750                  | 892     | 69500                        | 7080  | 1.06 | 55.5                           | 7360                  | 750     | 66200                        | 6750  | 1.22 | 606 -                      | 6205       | - 21            | B-105                   | B-121 | B-140 |
|                                |                       |         | 71000                        | 7240  | 1.43 |                                |                       |         | 67700                        | 6900  | 1.67 | 606 -                      | 6215       | - 21            | B-105                   | B-121 | B-140 |
|                                |                       |         | 75100                        | 7660  | 1.69 |                                |                       |         | 71500                        | 7290  | 2.01 | 606 -                      | 6225       | - 21            | B-106                   | B-122 | B-141 |
|                                |                       |         | 94100                        | 9590  | 2.16 |                                |                       |         | 89500                        | 9130  | 2.17 | 606 -                      | 6235       | - 21            | B-106                   | B-122 | B-141 |
| 33.8                           | 12100                 | 1230    | 76800                        | 7830  | 1.05 | 40.2                           | 10200                 | 1040    | 73200                        | 7460  | 1.24 | 606 -                      | 6215       | - 29            | B-105                   | B-121 | B-140 |
|                                |                       |         | 102000                       | 10400 | 1.56 |                                |                       |         | 97500                        | 9940  | 1.67 | 606 -                      | 6235       | - 29            | B-106                   | B-122 | B-141 |
|                                |                       |         | 114000                       | 11700 | 2.09 |                                |                       |         | 109000                       | 11100 | 2.09 | 606 -                      | 6245       | - 29            | B-107                   | B-123 | B-142 |
| 33.7                           | 12100                 | 1230    | 77200                        | 7870  | 1.00 | 40.7                           | 10000                 | 1020    | 73300                        | 7470  | 1.00 | 60 -                       | 6215       | - 43            | B-105                   | B-121 | B-140 |
|                                |                       |         | 82000                        | 8360  | 1.26 |                                |                       |         | 77800                        | 7940  | 1.26 | 60 -                       | 6225       | - 43            | B-106                   | B-122 | B-141 |
| 22.8                           | 17900                 | 1830    | 114000                       | 11600 | 1.06 | 27.1                           | 15100                 | 1540    | 108000                       | 11100 | 1.21 | 606 -                      | 6235       | - 43            | B-106                   | B-122 | B-141 |
|                                |                       |         | 128000                       | 13100 | 1.44 |                                |                       |         | 122000                       | 12400 | 1.67 | 606 -                      | 6245       | - 43            | B-107                   | B-123 | B-142 |
|                                |                       |         | 157000                       | 16000 | 1.73 |                                |                       |         | 150000                       | 15300 | 1.98 | 606 -                      | 6255       | - 43            | B-107                   | B-123 | B-142 |
|                                |                       |         | 193000                       | 19700 | 2.51 |                                |                       |         | 184000                       | 18700 | 2.51 | 606 -                      | 6265       | - 43            | B-107                   | B-123 | B-142 |
| 16.6                           | 24600                 | 2510    | 139000                       | 14100 | 1.05 | 19.7                           | 20700                 | 2110    | 132000                       | 13500 | 1.25 | 606 -                      | 6245       | - 59            | B-107                   | B-123 | B-142 |
|                                |                       |         | 210000                       | 21400 | 1.87 |                                |                       |         | 200000                       | 20400 | 2.09 | 606 -                      | 6265       | - 59            | B-107                   | B-123 | B-142 |
| 12.0                           | 32300                 | 3290    | 190000                       | 19400 | 0.85 | 14.5                           | 26700                 | 2730    | 180000                       | 18400 | 1.03 | 60 -                       | 6255DB     | - 121           | B-115                   | B-132 | B-151 |
|                                |                       |         | 234000                       | 23800 | 0.97 |                                |                       |         | 222000                       | 22600 | 1.07 | 60 -                       | 6265DA     | - 121           | B-115                   | B-132 | B-151 |
| 11.3                           | 36200                 | 3690    | 235000                       | 23900 | 1.19 | 13.4                           | 30500                 | 3110    | 223000                       | 22800 | 1.19 | 606 -                      | 6265       | - 87            | B-107                   | B-123 | B-142 |
| 8.79                           | 44000                 | 4490    | 250000                       | 25500 | 0.98 | 10.6                           | 36500                 | 3720    | 237000                       | 24200 | 1.13 | 60 -                       | 6265DA     | - 165           | B-115                   | B-132 | B-151 |
| 7.44                           | 52000                 | 5300    | 262000                       | 26700 | 0.84 | 8.97                           | 43100                 | 4390    | 248000                       | 25300 | 1.01 | 60 -                       | 6265DA     | - 195           | B-115                   | B-132 | B-151 |
| 6.28                           | 46000                 | 4690    | 276000                       | 28100 | *    | 7.58                           | 46000                 | 4690    | 265000                       | 27000 | *    | 60 -                       | 6265DA     | - 231           | B-115                   | B-132 | B-151 |
| 4.55                           | 68200                 | 6950    | 248000                       | 25300 | *    | 5.49                           | 68200                 | 6950    | 248000                       | 25300 | *    | 60 -                       | 6275DA     | - 319           | B-115                   | -     | B-151 |
|                                | 85100                 | 8670    | 248000                       | 25300 | 0.80 |                                | 70500                 | 7190    | 248000                       | 25300 | 0.97 | 60 -                       | 6275DA     | - 319           | B-115                   | -     | B-151 |

GEARMOTORS

Selection Tables  
45 kW, 55 kW

| 55 kW | Hz             |       | 50Hz |     | 60Hz |      |
|-------|----------------|-------|------|-----|------|------|
|       | P              |       | 4    | 6   | 4    | 6    |
|       | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n: Motor Speed

| 50Hz                           |                       |                              |              |             | 60Hz                           |                       |                              |              |             | Nomenclature            |            |                 | Page of Dimension Sheet |              |              |
|--------------------------------|-----------------------|------------------------------|--------------|-------------|--------------------------------|-----------------------|------------------------------|--------------|-------------|-------------------------|------------|-----------------|-------------------------|--------------|--------------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro | SF           |             | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load<br>Pro | SF           |             | Input Capacity - Symbol | Frame Size | Reduction Ratio | CNHM                    | CNFM         | CNVM         |
| [r/min]                        | [N·m]                 | [kgf·m]                      | [N]          | [kgf]       | [r/min]                        | [N·m]                 | [kgf·m]                      | [N]          | [kgf]       |                         |            |                 | CHHM                    | CHFM         | CVVM         |
| 132                            | 3790                  | 386                          | <b>51700</b> | <b>5270</b> | 159                            | 3140                  | 320                          | <b>49000</b> | <b>5000</b> | 75 -                    | 6205       | - 11            | <b>B-105</b>            | <b>B-121</b> | <b>B-140</b> |
|                                |                       |                              | 52400        | 5340        |                                |                       |                              | 49700        | 5060        |                         |            |                 | B-105                   | B-121        | B-140        |
|                                |                       |                              | 55600        | 5670        |                                |                       |                              | 52700        | 5370        |                         |            |                 | B-106                   | B-122        | B-141        |
| 96.7                           | 5160                  | 526                          | <b>55500</b> | <b>5660</b> | 117                            | 4280                  | 436                          | <b>52600</b> | <b>5360</b> | 75 -                    | 6205       | - 15            | <b>B-105</b>            | <b>B-121</b> | <b>B-140</b> |
|                                |                       |                              | 56200        | 5730        |                                |                       |                              | 53300        | 5430        |                         |            |                 | B-105                   | B-121        | B-140        |
|                                |                       |                              | 60000        | 6120        |                                |                       |                              | 56900        | 5800        |                         |            |                 | B-106                   | B-122        | B-141        |
| 89.1                           | 5600                  | 571                          | <b>57800</b> | <b>5900</b> | 106                            | 4710                  | 480                          | <b>55100</b> | <b>5610</b> | 756 -                   | 6205       | - 11            | ☆                       | -            | -            |
|                                |                       |                              | 58600        | 5970        |                                |                       |                              | 55800        | 5690        |                         |            |                 | ☆                       | -            | -            |
|                                |                       |                              | 62200        | 6340        |                                |                       |                              | 59300        | 6040        |                         |            |                 | ☆                       | -            | -            |
| 69.0                           | 7230                  | 737                          | <b>61900</b> | <b>6310</b> | 83.3                           | 5990                  | 610                          | <b>58700</b> | <b>5980</b> | 75 -                    | 6205       | - 21            | <b>B-105</b>            | <b>B-121</b> | <b>B-140</b> |
|                                |                       |                              | 63300        | 6450        |                                |                       |                              | 60000        | 6120        |                         |            |                 | B-105                   | B-121        | B-140        |
|                                |                       |                              | 66900        | 6820        |                                |                       |                              | 63400        | 6470        |                         |            |                 | B-106                   | B-122        | B-141        |
| 65.3                           | 7640                  | 779                          | <b>62000</b> | <b>6320</b> | 77.7                           | 6420                  | 655                          | <b>59000</b> | <b>6020</b> | 756 -                   | 6205       | - 15            | ☆                       | -            | -            |
|                                |                       |                              | 62800        | 6400        |                                |                       |                              | 59800        | 6100        |                         |            |                 | ☆                       | -            | -            |
|                                |                       |                              | 67100        | 6840        |                                |                       |                              | 63900        | 6510        |                         |            |                 | ☆                       | -            | -            |

6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

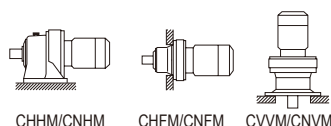


## Selection Tables Gearmotors

| 55 kW                          |                                   | n <sub>1</sub> : Motor Speed |        |       |      |                                |                                   |                              |        |       |      |  |            |                 |  |       |       |  |  |  |
|--------------------------------|-----------------------------------|------------------------------|--------|-------|------|--------------------------------|-----------------------------------|------------------------------|--------|-------|------|-------------------------------------------------------------------------------------|------------|-----------------|-------------------------------------------------------------------------------------|-------|-------|-------------------------------------------------------------------------------------|--|--|
|                                |                                   | Hz                           |        | 50Hz  |      |                                |                                   | 60Hz                         |        |       |      |                                                                                     |            |                 |                                                                                     |       |       |                                                                                     |  |  |
|                                |                                   | P                            |        | 4     |      | 6                              |                                   | 4                            |        | 6     |      |                                                                                     |            |                 |                                                                                     |       |       |                                                                                     |  |  |
|                                |                                   | n <sub>1</sub>               | r/min  | 1450  |      | 980                            |                                   | 1750                         |        | 1165  |      |                                                                                     |            |                 |                                                                                     |       |       |                                                                                     |  |  |
| 50Hz                           |                                   |                              |        |       |      | 60Hz                           |                                   |                              |        |       |      | Nomenclature                                                                        |            |                 | Page of Dimension Sheet                                                             |       |       |                                                                                     |  |  |
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    |      | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    |      | Input Capacity -<br>Symbol                                                          | Frame Size | Reduction Ratio | CNHN                                                                                | CNFM  | CNVM  |                                                                                     |  |  |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |      | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |      |                                                                                     |            |                 | CHHM                                                                                | CHFM  | CVVM  |                                                                                     |  |  |
| 50.0                           | 9980                              | 1020                         | 68500  | 6980  | 1.06 | 60.3                           | 8270                              | 843                          | 65000  | 6630  | 1.06 | 75 -                                                                                | 6215       | - 29            | B-105                                                                               | B-121 | B-140 |                                                                                     |  |  |
|                                |                                   |                              | 72700  | 7410  | 1.37 |                                |                                   |                              | 69000  | 7030  | 1.37 | 75 -                                                                                | 6225       | - 29            | B-106                                                                               | B-122 | B-141 |                                                                                     |  |  |
| 46.7                           | 10700                             | 1090                         | 70500  | 7190  | 1.17 | 55.5                           | 8990                              | 917                          | 67200  | 6860  | 1.37 | 756 -                                                                               | 6215       | - 21            | ☆                                                                                   | -     | -     | -                                                                                   |  |  |
|                                |                                   |                              | 74700  | 7610  | 1.38 |                                |                                   |                              | 71200  | 7250  | 1.65 | 756 -                                                                               | 6225       | - 21            | ☆                                                                                   | -     | -     | -                                                                                   |  |  |
|                                |                                   |                              | 93700  | 9550  | 1.77 |                                |                                   |                              | 89200  | 9090  | 1.77 | 756 -                                                                               | 6235       | - 21            |                                                                                     | B-106 | B-122 | B-141                                                                               |  |  |
| 33.8                           | 14800                             | 1510                         | 80900  | 8240  | 1.02 | 40.2                           | 12400                             | 1270                         | 77200  | 7870  | 1.21 | 756 -                                                                               | 6225       | - 29            | ☆                                                                                   | -     | -     | -                                                                                   |  |  |
|                                |                                   |                              | 114000 | 11600 | 1.71 |                                |                                   |                              | 108000 | 11100 | 1.71 | 756 -                                                                               | 6245       | - 29            |                                                                                     | B-107 | B-123 | B-142                                                                               |  |  |
|                                |                                   |                              | 141000 | 14300 | 2.15 |                                |                                   |                              | 134000 | 13600 | 2.15 | 756 -                                                                               | 6255       | - 29            |                                                                                     | B-107 | B-123 | B-142                                                                               |  |  |
| 33.7                           | 14800                             | 1510                         | 81400  | 8290  | 1.03 | 40.7                           | 12300                             | 1250                         | 77300  | 7880  | 1.03 | 75 -                                                                                | 6225       | - 43            | B-106                                                                               | B-122 | B-141 |                                                                                     |  |  |
| 22.8                           | 21900                             | 2230                         | 127000 | 13000 | 1.18 | 27.1                           | 18400                             | 1880                         | 121000 | 12400 | 1.37 | 756 -                                                                               | 6245       | - 43            |                                                                                     | B-107 | B-123 | B-142                                                                               |  |  |
|                                |                                   |                              | 157000 | 16000 | 1.42 |                                |                                   |                              | 149000 | 15200 | 1.62 | 756 -                                                                               | 6255       | - 43            |                                                                                     | B-107 | B-123 | B-142                                                                               |  |  |
|                                |                                   |                              | 192000 | 19600 | 2.05 |                                |                                   |                              | 183000 | 18700 | 2.05 | 756 -                                                                               | 6265       | - 43            |                                                                                     | B-107 | B-123 | B-142                                                                               |  |  |
| 16.6                           | 30000                             | 3060                         | 170000 | 17400 | 1.03 | 19.7                           | 25300                             | 2580                         | 162000 | 16500 | 1.18 | 756 -                                                                               | 6255       | - 59            | B-107                                                                               | B-123 | B-142 |                                                                                     |  |  |
|                                |                                   |                              | 209000 | 21400 | 1.53 |                                |                                   |                              | 199000 | 20300 | 1.71 | 756 -                                                                               | 6265       | - 59            |                                                                                     | B-107 | B-123 | B-142                                                                               |  |  |
|                                |                                   |                              | 248000 | 25300 | 2.27 |                                |                                   |                              | 248000 | 25300 | 2.40 | 756 -                                                                               | 6275       | - 59            | ☆                                                                                   | -     | -     | -                                                                                   |  |  |



## Selection Tables Gearmotors

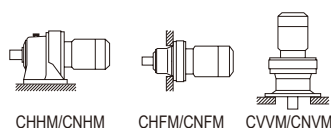


| 90 kW | Hz             |       | 50Hz |     | 60Hz |      |
|-------|----------------|-------|------|-----|------|------|
|       | P              |       | 4    | 6   | 4    | 6    |
|       | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

n<sub>1</sub>: Motor Speed

| 50Hz                           |                                   |                              |        |       |      | 60Hz                           |                                   |                              |        |       |      | Nomenclature               |            |                 |        | Page of Dimension Sheet |      |        |
|--------------------------------|-----------------------------------|------------------------------|--------|-------|------|--------------------------------|-----------------------------------|------------------------------|--------|-------|------|----------------------------|------------|-----------------|--------|-------------------------|------|--------|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    |      | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    |      | Input Capacity -<br>Symbol | Frame Size | Reduction Ratio |        | CNHM                    | CNFM | CNVM   |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |      | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] |      |                            |            |                 |        | CHHM                    | CHFM | CVVM   |
| 89.1                           | 9170                              | 934                          | 77300  | 7880  | 1.26 | 106                            | 7710                              | 786                          | 73600  | 7500  | 1.26 | 1256 -                     | 6235       | - 11            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 86100  | 8780  | 1.47 |                                |                                   |                              | 82000  | 8360  | 1.47 | 1256 -                     | 6245       | - 11            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 106000 | 10800 | 1.68 |                                |                                   |                              | 101000 | 10300 | 1.68 | 1256 -                     | 6255       | - 11            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 130000 | 13200 | 1.94 |                                |                                   |                              | 123000 | 12600 | 1.94 | 1256 -                     | 6265       | - 11            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 82400  | 8400  | 1.26 |                                |                                   |                              | 78500  | 8010  | 1.26 | 1256 -                     | 6235       | - 15            | ☆      | -                       | -    | -      |
| 65.3                           | 12500                             | 1270                         | 92300  | 9410  | 1.47 | 77.7                           | 10500                             | 1070                         | 87900  | 8960  | 1.47 | 1256 -                     | 6245       | - 15            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 113000 | 11600 | 1.68 |                                |                                   |                              | 108000 | 11000 | 1.68 | 1256 -                     | 6255       | - 15            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 139000 | 14100 | 1.94 |                                |                                   |                              | 132000 | 13400 | 1.94 | 1256 -                     | 6265       | - 15            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 92200  | 9400  | 1.08 |                                |                                   |                              | 88000  | 8970  | 1.08 | 1256 -                     | 6235       | - 21            | ☆      | -                       | -    | -      |
| 46.7                           | 17500                             | 1780                         | 103000 | 10500 | 1.33 | 55.5                           | 14700                             | 1500                         | 98200  | 10000 | 1.33 | 1256 -                     | 6245       | - 21            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 126000 | 12900 | 1.68 |                                |                                   |                              | 120000 | 12300 | 1.68 | 1256 -                     | 6255       | - 21            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 155000 | 15800 | 1.91 |                                |                                   |                              | 147000 | 15000 | 1.91 | 1256 -                     | 6265       | - 21            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 112000 | 11400 | 1.05 |                                |                                   |                              | 107000 | 10900 | 1.05 | 1256 -                     | 6245       | - 29            | ☆      | -                       | -    | -      |
| 33.8                           | 24200                             | 2460                         | 139000 | 14100 | 1.31 | 40.2                           | 20300                             | 2070                         | 132000 | 13500 | 1.31 | 1256 -                     | 6255       | - 29            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 171000 | 17400 | 1.77 |                                |                                   |                              | 163000 | 16600 | 1.77 | 1256 -                     | 6265       | - 29            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 190000 | 19400 | 1.26 |                                |                                   |                              | 181000 | 18500 | 1.26 | 1256 -                     | 6265       | - 43            | ☆      | -                       | -    | -      |
| 22.8                           | 35800                             | 3650                         | 248000 | 25300 | 1.68 | 27.1                           | 30100                             | 3070                         | 248000 | 25300 | 1.68 | 1256 -                     | 6275       | - 43            | ☆      | -                       | -    | -      |
|                                |                                   |                              | 16.6   | 49200 | 5010 |                                |                                   |                              | 248000 | 25300 | 1.39 | 19.7                       | 41400      | 4220            | 248000 | 25300                   | 1.47 | 1256 - |

GEARMOTORS

Selection Tables  
90 kW, 110 kW

| 110 kW | Hz             |       | 50Hz |     | 60Hz |      |
|--------|----------------|-------|------|-----|------|------|
|        | P              |       | 4    | 6   | 4    | 6    |
|        | n <sub>1</sub> | r/min | 1450 | 980 | 1750 | 1165 |

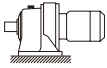
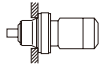
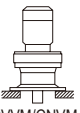
n<sub>1</sub>: Motor Speed

| 50Hz                           |                                   |                              |        |       |                                | 60Hz                              |                              |        |        |                            |            | Nomenclature    |        |      | Page of Dimension Sheet |   |   |
|--------------------------------|-----------------------------------|------------------------------|--------|-------|--------------------------------|-----------------------------------|------------------------------|--------|--------|----------------------------|------------|-----------------|--------|------|-------------------------|---|---|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF    | Output Speed<br>n <sub>2</sub> | Output Torque<br>T <sub>out</sub> | Allowable Radial Load<br>Pro |        | SF     | Input Capacity -<br>Symbol | Frame Size | Reduction Ratio | CNHM   | CNFM | CNVM                    |   |   |
| [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf] | [r/min]                        | [N·m]                             | [kgf·m]                      | [N]    | [kgf]  |                            |            |                 | CHHM   | CHFM | CVVM                    |   |   |
| 89.1                           | 11200                             | 1140                         | 85700  | 8730  | 106                            | 9420                              | 961                          | 81600  | 8320   | 1.20                       | 1506 -     | 6245            | - 11   | ☆    | -                       | - | - |
|                                |                                   |                              | 105000 | 10700 |                                |                                   |                              | 1.37   | 100000 |                            | 10200      | 1.37            | 1506 - | 6255 | - 11                    | ☆ | - |
| 65.3                           | 15300                             | 1560                         | 91700  | 9350  | 77.7                           | 12800                             | 1310                         | 87500  | 8910   | 1.20                       | 1506 -     | 6245            | - 15   | ☆    | -                       | - | - |
|                                |                                   |                              | 113000 | 11500 |                                |                                   |                              | 1.37   | 108000 |                            | 11000      | 1.37            | 1506 - | 6255 | - 15                    | ☆ | - |
| 46.7                           | 21400                             | 2180                         | 102000 | 10400 | 55.5                           | 18000                             | 1830                         | 97500  | 9940   | 1.09                       | 1506 -     | 6245            | - 21   | ☆    | -                       | - | - |
|                                |                                   |                              | 126000 | 12800 |                                |                                   |                              | 1.37   | 120000 |                            | 12200      | 1.37            | 1506 - | 6255 | - 21                    | ☆ | - |
| 33.8                           | 29500                             | 3010                         | 138000 | 14000 | 40.2                           | 24800                             | 2530                         | 131000 | 13400  | 1.07                       | 1506 -     | 6255            | - 29   | ☆    | -                       | - | - |
|                                |                                   |                              | 170000 | 17300 |                                |                                   |                              | 1.45   | 162000 |                            | 16500      | 1.45            | 1506 - | 6265 | - 29                    | ☆ | - |
| 22.8                           | 43800                             | 4460                         | 189000 | 19300 | 27.1                           | 36800                             | 3750                         | 180000 | 18400  | 1.03                       | 1506 -     | 6265            | - 43   | ☆    | -                       | - | - |

6. "☆" indicates models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
7. Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
8. "(K)" indicates models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
9. Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

## Selection Tables Gearmotors

| 132 kW |  | n <sub>1</sub> : Motor Speed |  |      |  |      |  |      |  |  |      |  |  |
|--------|--|------------------------------|--|------|--|------|--|------|--|--|------|--|--|
|        |  | Hz                           |  | 50Hz |  | 60Hz |  |      |  |  |      |  |  |
|        |  | P                            |  | 4    |  | 6    |  |      |  |  |      |  |  |
|        |  | n <sub>1</sub> r/min         |  | 1450 |  | 980  |  | 1750 |  |  | 1165 |  |  |

CHHM/CNHM
CHFM/CNFM
CVVM/CNVM

| 50Hz                           |                       |                           |              |             |  | 60Hz                           |                       |                           |              |             |  | Nomenclature            |             |                 | Page of Dimension Sheet          |   |   |
|--------------------------------|-----------------------|---------------------------|--------------|-------------|--|--------------------------------|-----------------------|---------------------------|--------------|-------------|--|-------------------------|-------------|-----------------|----------------------------------|---|---|
| Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load Pro |              | SF          |  | Output Speed<br>n <sub>2</sub> | Output Torque<br>Tout | Allowable Radial Load Pro |              | SF          |  | Input Capacity - Symbol | Frame Size  | Reduction Ratio | CNHM CNFM CNVM<br>CHHM CHFM CVVM |   |   |
| [r/min]                        | [N·m] [kgf·m]         | [N]                       | [kgf]        |             |  | [r/min]                        | [N·m] [kgf·m]         | [N]                       | [kgf]        |             |  |                         |             |                 |                                  |   |   |
| 89.1                           | 13400 1370            | <b>105000</b>             | <b>10700</b> | <b>1.14</b> |  | 106                            | 11300 1150            | <b>99900</b>              | <b>10200</b> | <b>1.14</b> |  | 1756 -                  | <b>6255</b> | - <b>11</b> ☆   | -                                | - | - |
|                                |                       | 129000                    | 13100        | 1.33        |  |                                |                       | 123000                    | 12500        | 1.33        |  | 1756 -                  | 6265        | - 11 ☆          | -                                | - | - |
| 65.3                           | 18300 1870            | <b>112000</b>             | <b>11500</b> | <b>1.14</b> |  | 77.7                           | 15400 1570            | <b>107000</b>             | <b>10900</b> | <b>1.14</b> |  | 1756 -                  | <b>6255</b> | - <b>15</b> ☆   | -                                | - | - |
|                                |                       | 138000                    | 14000        | 1.33        |  |                                |                       | 131000                    | 13400        | 1.33        |  | 1756 -                  | 6265        | - 15 ☆          | -                                | - | - |
| 46.7                           | 25700 2620            | <b>125000</b>             | <b>12700</b> | <b>1.14</b> |  | 55.5                           | 21600 2200            | <b>119000</b>             | <b>12100</b> | <b>1.14</b> |  | 1756 -                  | <b>6255</b> | - <b>21</b> ☆   | -                                | - | - |
|                                |                       | 154000                    | 15700        | 1.30        |  |                                |                       | 146000                    | 14900        | 1.30        |  | 1756 -                  | 6265        | - 21 ☆          | -                                | - | - |
| 33.8                           | 35400 3610            | <b>169000</b>             | <b>17200</b> | <b>1.20</b> |  | 40.2                           | 29800 3040            | <b>161000</b>             | <b>16400</b> | <b>1.20</b> |  | 1756 -                  | <b>6265</b> | - <b>29</b> ☆   | -                                | - | - |

- Combinations in **bold** are the recommended models for operations for 10 hours/day with uniform load (service factor is about 1.0 for motor rating at 50Hz).
- Motor slippage may affect n<sub>1</sub> and n<sub>2</sub>. Refer to technical data for details.
- CNHM, CHHM, CNFM, CHFM, CNVM, and CVVM indicate types. Refer to page B-10 for details.
- Lubrication method is different for each model. Refer to "Lubrication" section in page F-4~F-5 for details.
- "6" at the end of "input capacity symbol" indicates models with 6P motor. Other models come with 4P motor.
- "☆" indicate models manufactured with reducer and motor separately mounted on a common baseplate (horizontal shaft direction) or on an adaptor (vertical shaft direction). Consult us for details, including dimensions.
- Allowable radial load (Pro) is the value at the midpoint of the slow speed shaft.
- "(K)" indicate models with reduction ratios equal to nominal ratio. Refer to Table A-3 "6000SK Series (Actual Reduction Ratio)" on page A-4 for actual reduction ratio. Indicated reduction ratio is the same as actual reduction ratio for other models.
- Maintain torque load during operation within "Output torque" in the table for models with "\*" in the SF column. They cannot be operated with 100% motor rating.

M E M O

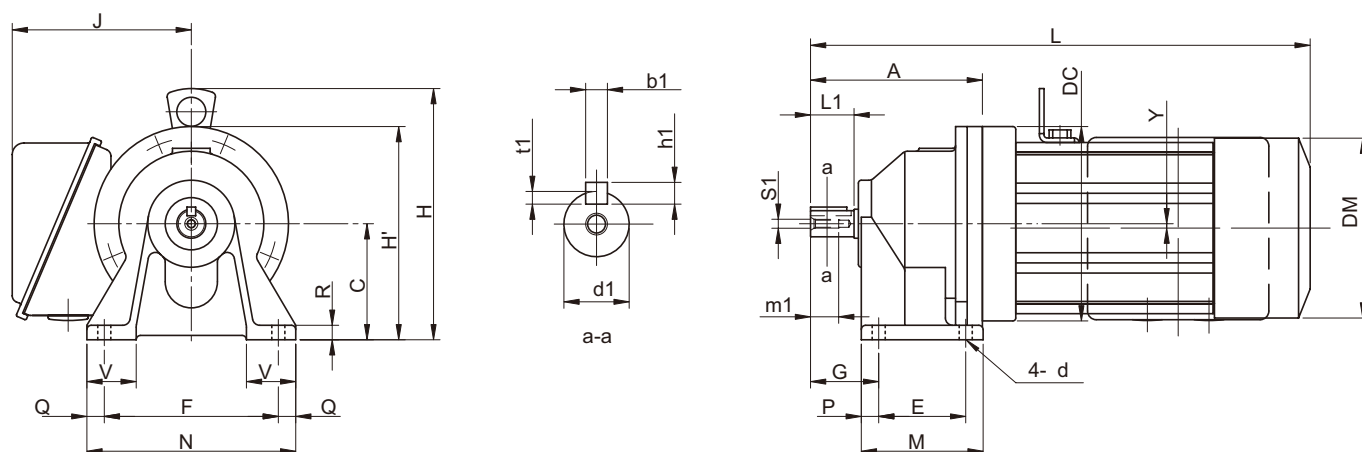
|   |   |   |   |
|---|---|---|---|
| M | E | M | O |
|---|---|---|---|

# B CYCLO® GEARMOTORS

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## 3. Dimension Tables

## Dimension Tables Gearmotors (Universal direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 607<sup>□</sup>SK to 609<sup>□</sup>SK

| Frame size<br>Note: 4 | A   | C   | DC  | E  | F   | G  | M   | N   | P  | Q  | R  | V  | Y | d  | Output Shaft<br>Note: 2, 3, 6 |    |    |    |     |    |    |
|-----------------------|-----|-----|-----|----|-----|----|-----|-----|----|----|----|----|---|----|-------------------------------|----|----|----|-----|----|----|
|                       |     |     |     |    |     |    |     |     |    |    |    |    |   |    | d1                            | L1 | b1 | h1 | t1  | S1 | m1 |
| 607 <sup>□</sup> SK   | 119 | 80  | 134 | 60 | 120 | 47 | 84  | 144 | 12 | 12 | 10 | 34 | 0 | 9  | 18                            | 30 | 6  | 6  | 3.5 | M6 | 16 |
| 608 <sup>□</sup> SK   | 140 | 90  | 150 | 75 | 120 | 52 | 99  | 144 | 12 | 12 | 13 | 37 | 0 | 9  | 22                            | 35 | 6  | 6  | 3.5 | M6 | 16 |
| 609 <sup>□</sup> SK   | 166 | 100 | 150 | 90 | 150 | 60 | 135 | 180 | 15 | 15 | 12 | 40 | 0 | 11 | 28                            | 35 | 8  | 7  | 4   | M8 | 20 |

| Model<br>Note: 4, 5                        | Motor |     | Standard |     |     |     |     |        | With Brake |     |     |     |     |        |
|--------------------------------------------|-------|-----|----------|-----|-----|-----|-----|--------|------------|-----|-----|-----|-----|--------|
|                                            | [kW]  | [P] | L        | H   | H'  | J   | DM  | W [kg] | L          | H   | H'  | J   | DM  | W [kg] |
| CHHM05 - 607 <sup>□</sup> SK - (B) - Ratio | 0.4   | 4   | 310      | -   | 147 | 113 | 124 | 10     | 342        | -   | 147 | 113 | 124 | 11     |
| CHHM08 - 607 <sup>□</sup> SK - (B) - Ratio | 0.55  | 4   | 351      | 193 | -   | 143 | 160 | 13     | 394        | 193 | -   | 143 | 160 | 15     |
| CHHM1 - 607 <sup>□</sup> SK - (B) - Ratio  | 0.75  | 4   | 351      | 193 | -   | 143 | 160 | 13     | 394        | 193 | -   | 143 | 160 | 15     |
| CHHM05 - 608 <sup>□</sup> SK - (B) - Ratio | 0.4   | 4   | 336      | -   | 165 | 113 | 124 | 11     | 368        | -   | 165 | 113 | 124 | 12     |
| CHHM08 - 608 <sup>□</sup> SK - (B) - Ratio | 0.55  | 4   | 377      | 203 | -   | 143 | 160 | 14     | 420        | 203 | -   | 143 | 160 | 16     |
| CHHM1 - 608 <sup>□</sup> SK - (B) - Ratio  | 0.75  | 4   | 377      | 203 | -   | 143 | 160 | 14     | 420        | 203 | -   | 143 | 160 | 16     |
| CHHM1H - 608 <sup>□</sup> SK - (B) - Ratio | 1.1   | 4   | 410      | 210 | -   | 148 | 169 | 19     | 472        | 210 | -   | 148 | 169 | 23     |
| CHHM2 - 608 <sup>□</sup> SK - (B) - Ratio  | 1.5   | 4   | 410      | 210 | -   | 148 | 169 | 19     | 472        | 210 | -   | 148 | 169 | 23     |
| CHHM05 - 609 <sup>□</sup> SK - (B) - Ratio | 0.4   | 4   | 362      | 207 | -   | 113 | 124 | 13     | 349        | 207 | -   | 113 | 124 | 14     |
| CHHM08 - 609 <sup>□</sup> SK - (B) - Ratio | 0.55  | 4   | 403      | 213 | -   | 143 | 160 | 16     | 446        | 213 | -   | 143 | 160 | 18     |
| CHHM1 - 609 <sup>□</sup> SK - (B) - Ratio  | 0.75  | 4   | 403      | 213 | -   | 143 | 160 | 16     | 446        | 213 | -   | 143 | 160 | 18     |
| CHHM1H - 609 <sup>□</sup> SK - (B) - Ratio | 1.1   | 4   | 436      | 220 | -   | 148 | 169 | 21     | 498        | 220 | -   | 148 | 169 | 25     |
| CHHM2 - 609 <sup>□</sup> SK - (B) - Ratio  | 1.5   | 4   | 436      | 220 | -   | 148 | 169 | 21     | 498        | 220 | -   | 148 | 169 | 25     |
| CHHM3 - 609 <sup>□</sup> SK - (B) - Ratio  | 2.2   | 4   | 456      | 226 | -   | 155 | 182 | 25     | 519        | 226 | -   | 155 | 182 | 31     |

Note: 1. □ indicates motor capacity.

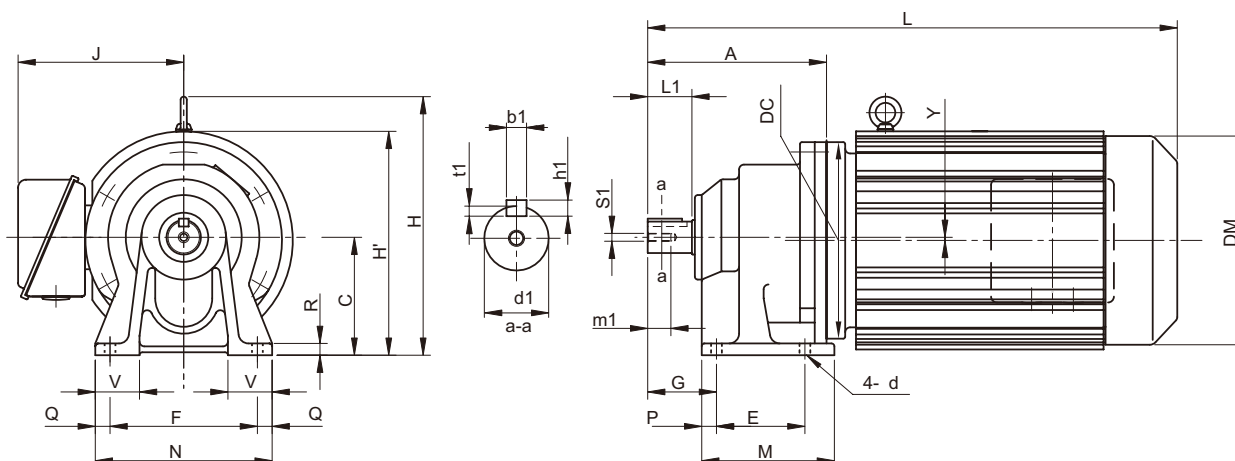
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."



# Dimension Tables Gearmotors (Universal direction, Foot-Mount)

## CHHM - 610□SK to 611□SK



| Frame size<br>Note: 4 | A   | C   | DC  | E  | F   | G  | M   | N   | P  | Q  | R  | V  | Y | d  | Output Shaft<br>Note: 2, 3, 6 |    |    |    |    |    |    |
|-----------------------|-----|-----|-----|----|-----|----|-----|-----|----|----|----|----|---|----|-------------------------------|----|----|----|----|----|----|
|                       |     |     |     |    |     |    |     |     |    |    |    |    |   |    | d1                            | L1 | b1 | h1 | t1 | S1 | m1 |
| 610□SK                | 170 | 100 | 162 | 90 | 150 | 60 | 135 | 180 | 15 | 15 | 12 | 40 | 0 | 11 | 28                            | 35 | 8  | 7  | 4  | M8 | 20 |
| 611□SK                | 182 | 120 | 204 | 90 | 150 | 70 | 135 | 180 | 15 | 15 | 12 | 45 | 3 | 11 | 32                            | 45 | 10 | 8  | 5  | M8 | 20 |

| Model<br>Note: 4, 5           | Motor |     | Standard |     |    |     |     |        |  | With Brake |     |    |     |     |        |
|-------------------------------|-------|-----|----------|-----|----|-----|-----|--------|--|------------|-----|----|-----|-----|--------|
|                               | [kW]  | [P] | L        | H   | H' | J   | DM  | W [kg] |  | L          | H   | H' | J   | DM  | W [kg] |
| CHHM05 - 610□SK - (B) - Ratio | 0.4   | 4   | 362      | 216 | -  | 113 | 124 | 14     |  | 393        | 216 | -  | 113 | 124 | 15     |
| CHHM08 - 610□SK - (B) - Ratio | 0.55  | 4   | 403      | 216 | -  | 143 | 160 | 17     |  | 452        | 216 | -  | 143 | 160 | 19     |
| CHHM1 - 610□SK - (B) - Ratio  | 0.75  | 4   | 403      | 216 | -  | 143 | 160 | 17     |  | 452        | 216 | -  | 143 | 160 | 19     |
| CHHM1H - 610□SK - (B) - Ratio | 1.1   | 4   | 436      | 220 | -  | 148 | 169 | 22     |  | 493        | 220 | -  | 148 | 169 | 26     |
| CHHM2 - 610□SK - (B) - Ratio  | 1.5   | 4   | 436      | 220 | -  | 148 | 169 | 22     |  | 493        | 220 | -  | 148 | 169 | 26     |
| CHHM3 - 610□SK - (B) - Ratio  | 2.2   | 4   | 456      | 226 | -  | 155 | 182 | 26     |  | 519        | 226 | -  | 155 | 182 | 32     |
| CHHM4 - 610□SK - (B) - Ratio  | 3.0   | 4   | 491      | 246 | -  | 166 | 222 | 38     |  | 563        | 246 | -  | 166 | 222 | 49     |
| CHHM5 - 610□SK - (B) - Ratio  | 3.7   | 4   | 491      | 246 | -  | 166 | 222 | 38     |  | 563        | 246 | -  | 166 | 222 | 49     |
| CHHM08 - 611□SK - (B) - Ratio | 0.55  | 4   | 419      | 230 | -  | 143 | 160 | 29     |  | 462        | 230 | -  | 143 | 160 | 31     |
| CHHM1 - 611□SK - (B) - Ratio  | 0.75  | 4   | 419      | 230 | -  | 143 | 160 | 29     |  | 462        | 230 | -  | 143 | 160 | 31     |
| CHHM1H - 611□SK - (B) - Ratio | 1.1   | 4   | 452      | 237 | -  | 148 | 169 | 34     |  | 514        | 237 | -  | 148 | 169 | 38     |
| CHHM2 - 611□SK - (B) - Ratio  | 1.5   | 4   | 452      | 237 | -  | 148 | 169 | 34     |  | 514        | 237 | -  | 148 | 169 | 38     |
| CHHM3 - 611□SK - (B) - Ratio  | 2.2   | 4   | 472      | 243 | -  | 155 | 182 | 38     |  | 535        | 243 | -  | 155 | 182 | 44     |
| CHHM4 - 611□SK - (B) - Ratio  | 3.0   | 4   | 495      | 263 | -  | 166 | 222 | 50     |  | 567        | 263 | -  | 166 | 222 | 61     |
| CHHM5 - 611□SK - (B) - Ratio  | 3.7   | 4   | 495      | 263 | -  | 166 | 222 | 50     |  | 567        | 263 | -  | 166 | 222 | 61     |
| CHHM8 - 611□SK - (B) - Ratio  | 5.5   | 4   | 539      | 263 | -  | 166 | 222 | 58     |  | 611        | 263 | -  | 166 | 222 | 69     |

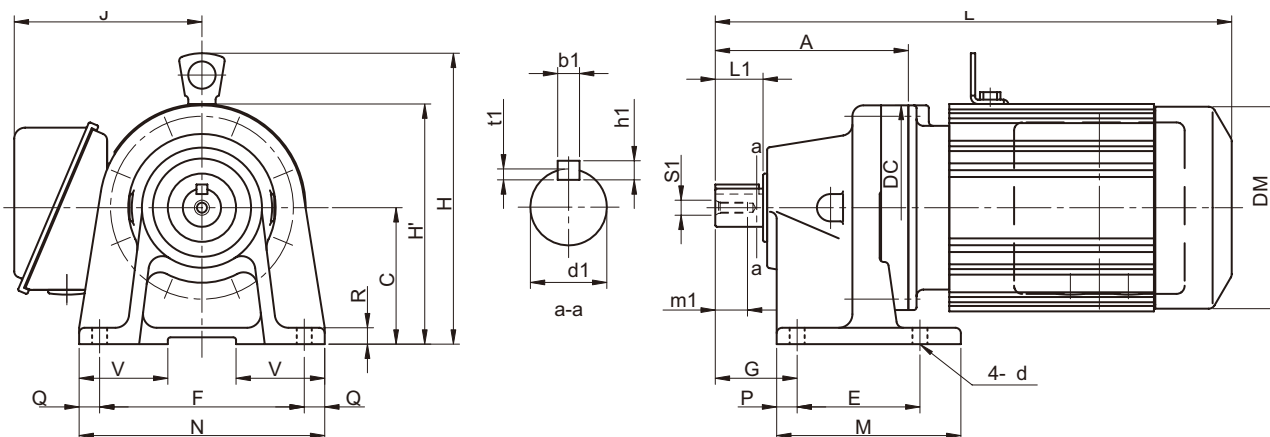
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Universal Direction, Foot-Mount)

CNHM<sup>Note: 1</sup> - 606□ to 609□

| Frame size<br>Note: 4 | A   | C   | DC  | E  | F   | G  | M   | N   | P  | Q  | R  | V  | d  | Output Shaft<br>Note: 2, 3, 6 |    |    |    |     |    |    |
|-----------------------|-----|-----|-----|----|-----|----|-----|-----|----|----|----|----|----|-------------------------------|----|----|----|-----|----|----|
|                       |     |     |     |    |     |    |     |     |    |    |    |    |    | d1                            | L1 | b1 | h1 | t1  | S1 | m1 |
| 606□                  | 92  | 80  | 110 | 60 | 120 | 41 | 84  | 144 | 12 | 12 | 10 | 48 | 9  | 14                            | 25 | 5  | 5  | 3   | M5 | 16 |
| 607□                  | 98  | 80  | 110 | 60 | 120 | 47 | 84  | 144 | 12 | 12 | 10 | 48 | 9  | 18                            | 30 | 6  | 6  | 3.5 | M6 | 16 |
| 608□                  | 129 | 90  | 134 | 75 | 120 | 52 | 99  | 144 | 12 | 12 | 13 | 49 | 9  | 22                            | 35 | 6  | 6  | 3.5 | M6 | 16 |
| 609□                  | 142 | 100 | 150 | 90 | 150 | 60 | 135 | 180 | 15 | 15 | 12 | 65 | 11 | 28                            | 35 | 8  | 7  | 4   | M8 | 20 |

| Model<br>Note: 4, 5         | Motor |     | Standard |     |     |     |     | With Brake |     |     |     |     |     |        |
|-----------------------------|-------|-----|----------|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|--------|
|                             | [kW]  | [P] | L        | H   | H'  | J   | DM  | W [kg]     | L   | H   | H'  | J   | DM  | W [kg] |
| CNHM01 - 606□ - (B) - Ratio | 0.1   | 4   | 254      | -   | 140 | 113 | 119 | 7          | 261 | -   | 138 | 113 | 124 | 8      |
| CNHM02 - 606□ - (B) - Ratio | 0.2   | 4   | 272      | -   | 138 | 113 | 124 | 8          | 300 | -   | 138 | 113 | 124 | 9      |
| CNHM03 - 606□ - (B) - Ratio | 0.25  | 4   | 272      | -   | 138 | 113 | 124 | 8          | 300 | -   | 138 | 113 | 124 | 9      |
| CNHM01 - 607□ - (B) - Ratio | 0.1   | 4   | 260      | -   | 140 | 113 | 119 | 7          | 267 | -   | 138 | 113 | 124 | 8      |
| CNHM02 - 607□ - (B) - Ratio | 0.2   | 4   | 278      | -   | 138 | 113 | 124 | 8          | 306 | -   | 138 | 113 | 124 | 9      |
| CNHM03 - 607□ - (B) - Ratio | 0.25  | 4   | 278      | -   | 138 | 113 | 124 | 8          | 306 | -   | 138 | 113 | 124 | 9      |
| CNHM05 - 607□ - (B) - Ratio | 0.4   | 4   | 294      | -   | 138 | 113 | 124 | 9          | 326 | -   | 138 | 113 | 124 | 10     |
| CNHM01 - 608□ - (B) - Ratio | 0.1   | 4   | 286      | -   | 157 | 113 | 119 | 10         | 293 | -   | 157 | 113 | 124 | 11     |
| CNHM02 - 608□ - (B) - Ratio | 0.2   | 4   | 304      | -   | 157 | 113 | 124 | 11         | 332 | -   | 157 | 113 | 124 | 12     |
| CNHM03 - 608□ - (B) - Ratio | 0.25  | 4   | 304      | -   | 157 | 113 | 124 | 11         | 332 | -   | 157 | 113 | 124 | 12     |
| CNHM05 - 608□ - (B) - Ratio | 0.4   | 4   | 320      | -   | 157 | 113 | 124 | 13         | 352 | -   | 157 | 113 | 124 | 14     |
| CNHM08 - 608□ - (B) - Ratio | 0.55  | 4   | 361      | 203 | -   | 143 | 160 | 17         | 404 | 203 | -   | 143 | 160 | 18     |
| CNHM1 - 608□ - (B) - Ratio  | 0.75  | 4   | 361      | 203 | -   | 143 | 160 | 17         | 404 | 203 | -   | 143 | 160 | 18     |
| CNHM01 - 609□ - (B) - Ratio | 0.1   | 4   | 304      | -   | 175 | 113 | 119 | 12         | 311 | -   | 175 | 113 | 124 | 14     |
| CNHM02 - 609□ - (B) - Ratio | 0.2   | 4   | 322      | -   | 175 | 113 | 124 | 13         | 350 | -   | 175 | 113 | 124 | 15     |
| CNHM03 - 609□ - (B) - Ratio | 0.25  | 4   | 322      | -   | 175 | 113 | 124 | 13         | 350 | -   | 175 | 113 | 124 | 15     |
| CNHM05 - 609□ - (B) - Ratio | 0.4   | 4   | 338      | -   | 175 | 113 | 124 | 14         | 370 | -   | 175 | 113 | 124 | 16     |
| CNHM08 - 609□ - (B) - Ratio | 0.55  | 4   | 379      | 213 | -   | 143 | 160 | 18         | 422 | 213 | -   | 143 | 160 | 21     |
| CNHM1 - 609□ - (B) - Ratio  | 0.75  | 4   | 379      | 213 | -   | 143 | 160 | 18         | 422 | 213 | -   | 143 | 160 | 21     |
| CNHM1H - 609□ - (B) - Ratio | 1.1   | 4   | 412      | 220 | -   | 148 | 169 | 21         | 474 | 220 | -   | 148 | 169 | 26     |
| CNHM2 - 609□ - (B) - Ratio  | 1.5   | 4   | 412      | 220 | -   | 148 | 169 | 21         | 474 | 220 | -   | 148 | 169 | 26     |

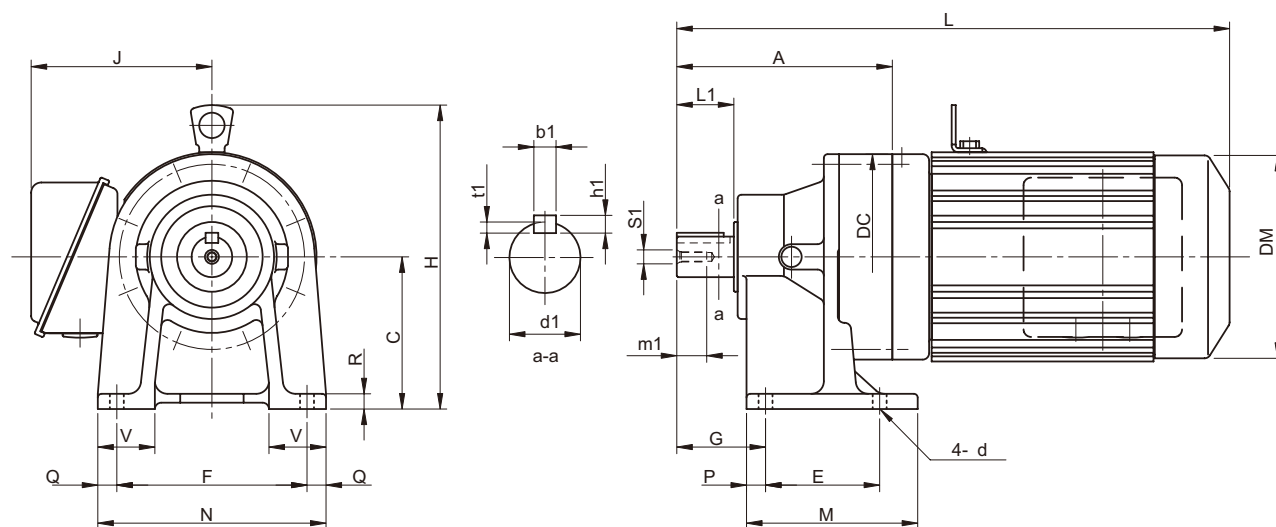
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

# Dimension Tables Gearmotors (Universal Direction, Foot-Mount)

CNHM<sup>Note: 1</sup> - 610□ to 612□



| Frame size<br><small>Note: 4</small> | A   | C   | DC  | E   | F   | G  | M   | N   | P  | Q  | R  | V  | d  | Output Shaft <small>Note: 2, 3, 6</small> |    |    |    |    |    |    |
|--------------------------------------|-----|-----|-----|-----|-----|----|-----|-----|----|----|----|----|----|-------------------------------------------|----|----|----|----|----|----|
|                                      |     |     |     |     |     |    |     |     |    |    |    |    |    | d1                                        | L1 | b1 | h1 | t1 | S1 | m1 |
| 610□                                 | 156 | 100 | 150 | 90  | 150 | 60 | 135 | 180 | 15 | 15 | 12 | 40 | 11 | 28                                        | 35 | 8  | 7  | 4  | M8 | 20 |
| 611□                                 | 170 | 120 | 162 | 90  | 150 | 70 | 135 | 180 | 15 | 15 | 12 | 45 | 11 | 32                                        | 45 | 10 | 8  | 5  | M8 | 20 |
| 612□                                 | 186 | 120 | 204 | 115 | 190 | 82 | 155 | 230 | 20 | 20 | 15 | 55 | 14 | 38                                        | 55 | 10 | 8  | 5  | M8 | 20 |

| Model<br><small>Note: 4, 5</small> | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                                    | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CNHM02 - 610□ - (B) - Ratio        | 0.2   | 4   | 336      | 207 | 113 | 124 | 18     | 364        | 207 | 113 | 124 | 20     |
| CNHM03 - 610□ - (B) - Ratio        | 0.25  | 4   | 336      | 207 | 113 | 124 | 18     | 364        | 207 | 113 | 124 | 20     |
| CNHM05 - 610□ - (B) - Ratio        | 0.4   | 4   | 352      | 207 | 113 | 124 | 19     | 384        | 207 | 113 | 124 | 21     |
| CNHM08 - 610□ - (B) - Ratio        | 0.55  | 4   | 393      | 213 | 143 | 160 | 23     | 436        | 213 | 143 | 160 | 26     |
| CNHM1 - 610□ - (B) - Ratio         | 0.75  | 4   | 393      | 213 | 143 | 160 | 23     | 436        | 213 | 143 | 160 | 26     |
| CNHM1H - 610□ - (B) - Ratio        | 1.1   | 4   | 426      | 220 | 148 | 169 | 27     | 488        | 220 | 148 | 169 | 32     |
| CNHM2 - 610□ - (B) - Ratio         | 1.5   | 4   | 426      | 220 | 148 | 169 | 27     | 488        | 220 | 148 | 169 | 32     |
| CNHM3 - 610□ - (B) - Ratio         | 2.2   | 4   | 446      | 226 | 155 | 182 | 31     | 509        | 226 | 155 | 182 | 37     |
| CNHM05 - 611□ - (B) - Ratio        | 0.4   | 4   | 363      | 236 | 113 | 124 | 20     | 394        | 236 | 113 | 124 | 21     |
| CNHM08 - 611□ - (B) - Ratio        | 0.55  | 4   | 403      | 236 | 143 | 160 | 23     | 452        | 236 | 143 | 160 | 26     |
| CNHM1 - 611□ - (B) - Ratio         | 0.75  | 4   | 403      | 236 | 143 | 160 | 23     | 452        | 236 | 143 | 160 | 26     |
| CNHM1H - 611□ - (B) - Ratio        | 1.1   | 4   | 436      | 240 | 148 | 169 | 26     | 493        | 240 | 148 | 169 | 31     |
| CNHM2 - 611□ - (B) - Ratio         | 1.5   | 4   | 436      | 240 | 148 | 169 | 26     | 493        | 240 | 148 | 169 | 31     |
| CNHM3 - 611□ - (B) - Ratio         | 2.2   | 4   | 456      | 246 | 155 | 182 | 30     | 519        | 246 | 155 | 182 | 36     |
| CNHM4 - 611□ - (B) - Ratio         | 3.0   | 4   | 491      | 266 | 166 | 222 | 40     | 563        | 266 | 166 | 222 | 50     |
| CNHM5 - 611□ - (B) - Ratio         | 3.7   | 4   | 491      | 266 | 166 | 222 | 40     | 563        | 266 | 166 | 222 | 50     |
| CNHM05 - 612□ - (B) - Ratio        | 0.4   | 4   | 387      | 257 | 113 | 124 | 30     | 419        | 257 | 113 | 124 | 32     |
| CNHM08 - 612□ - (B) - Ratio        | 0.55  | 4   | 423      | 233 | 143 | 160 | 32     | 466        | 233 | 143 | 160 | 35     |
| CNHM1 - 612□ - (B) - Ratio         | 0.75  | 4   | 423      | 233 | 143 | 160 | 32     | 466        | 233 | 143 | 160 | 35     |
| CNHM1H - 612□ - (B) - Ratio        | 1.1   | 4   | 456      | 240 | 148 | 169 | 36     | 518        | 240 | 148 | 169 | 41     |
| CNHM2 - 612□ - (B) - Ratio         | 1.5   | 4   | 456      | 240 | 148 | 169 | 36     | 518        | 240 | 148 | 169 | 41     |
| CNHM3 - 612□ - (B) - Ratio         | 2.2   | 4   | 476      | 246 | 155 | 182 | 40     | 539        | 246 | 155 | 182 | 47     |
| CNHM4 - 612□ - (B) - Ratio         | 3.0   | 4   | 499      | 266 | 166 | 222 | 50     | 571        | 266 | 166 | 222 | 60     |
| CNHM5 - 612□ - (B) - Ratio         | 3.7   | 4   | 499      | 266 | 166 | 222 | 50     | 571        | 266 | 166 | 222 | 60     |
| CNHM8 - 612□ - (B) - Ratio         | 5.5   | 4   | 543      | 266 | 166 | 222 | 57     | 615        | 266 | 166 | 222 | 67     |

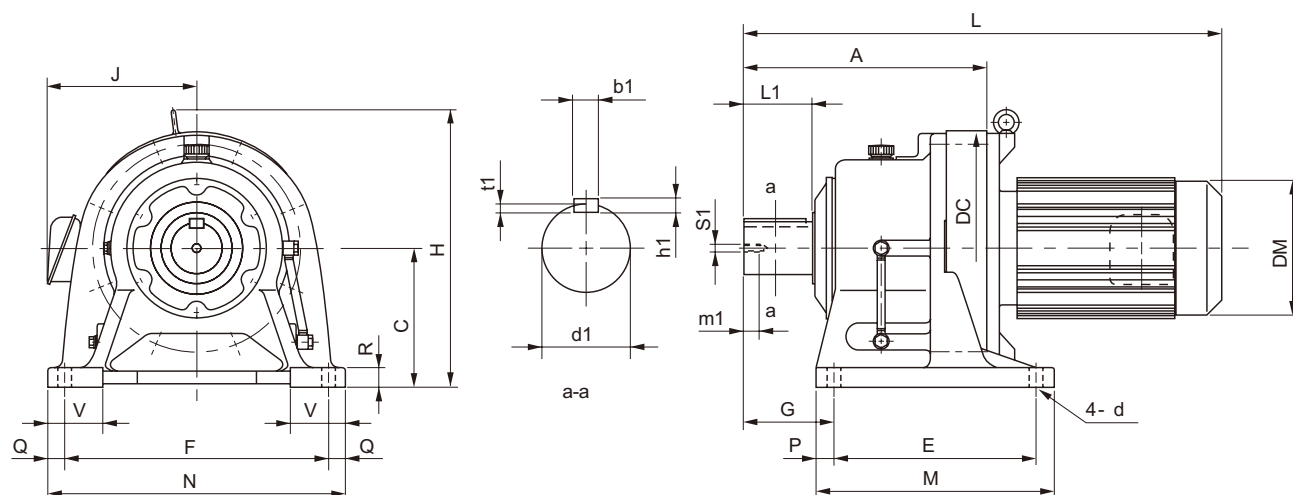
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 613□ to 614□

| Frame size<br>Note: 4 | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V  | d  | Output Shaft<br>Note: 2, 3, 6 |    |    |    |     |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-------------------------------|----|----|----|-----|-----|----|
|                       |     |     |     |     |     |     |     |     |    |    |    |    |    | d1                            | L1 | b1 | h1 | t1  | S1  | m1 |
| 613□                  | 240 | 150 | 230 | 145 | 290 | 100 | 195 | 330 | 25 | 20 | 22 | 65 | 18 | 50                            | 70 | 14 | 9  | 5.5 | M10 | 18 |
| 614□                  | 260 | 150 | 230 | 145 | 290 | 120 | 195 | 330 | 25 | 20 | 22 | 65 | 18 | 50                            | 90 | 14 | 9  | 5.5 | M10 | 18 |

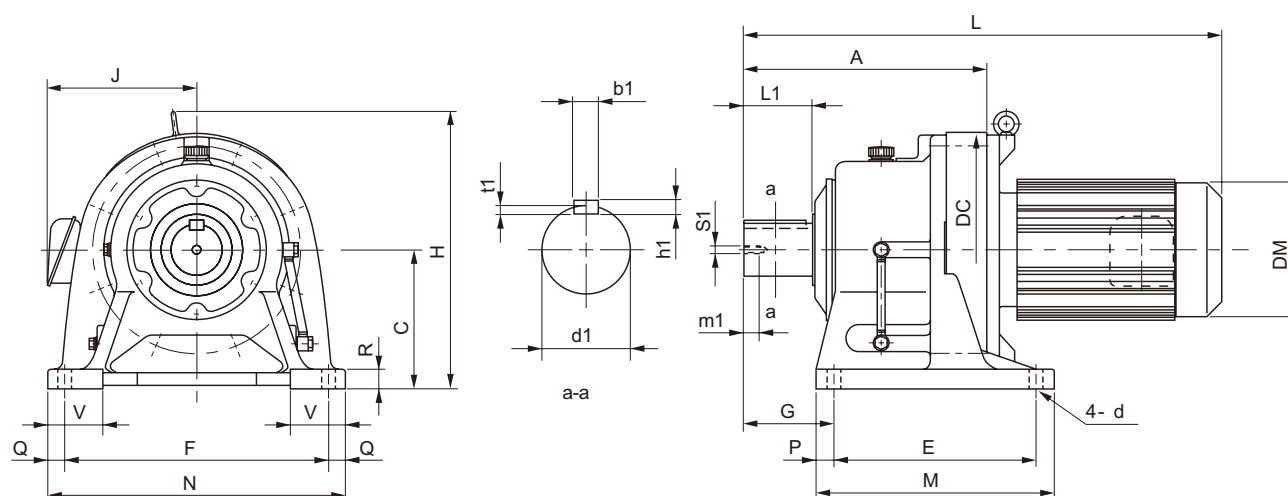
| Model<br>Note: 4, 5         | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|-----------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                             | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHHM08 - 613□ - (B) - Ratio | 0.55  | 4   | 477      | 265 | 143 | 160 | 51     | 520        | 265 | 143 | 160 | 54     |
| CHHM1 - 613□ - (B) - Ratio  | 0.75  | 4   | 477      | 265 | 143 | 160 | 51     | 520        | 265 | 143 | 160 | 54     |
| CHHM1H - 613□ - (B) - Ratio | 1.1   | 4   | 510      | 268 | 148 | 169 | 55     | 572        | 268 | 148 | 169 | 60     |
| CHHM2 - 613□ - (B) - Ratio  | 1.5   | 4   | 510      | 268 | 148 | 169 | 55     | 572        | 268 | 148 | 169 | 60     |
| CHHM3 - 613□ - (B) - Ratio  | 2.2   | 4   | 530      | 274 | 155 | 182 | 58     | 593        | 274 | 155 | 182 | 65     |
| CHHM4 - 613□ - (B) - Ratio  | 3.0   | 4   | 553      | 296 | 166 | 222 | 68     | 625        | 296 | 166 | 222 | 78     |
| CHHM5 - 613□ - (B) - Ratio  | 3.7   | 4   | 553      | 296 | 166 | 222 | 68     | 625        | 296 | 166 | 222 | 78     |
| CHHM8 - 613□ - (B) - Ratio  | 5.5   | 4   | 597      | 296 | 166 | 222 | 75     | 669        | 296 | 166 | 222 | 85     |
| CHHM10 - 613□ - (B) - Ratio | 7.5   | 4   | 620      | 323 | 211 | 251 | 90     | 715        | 323 | 211 | 251 | 108    |
| CHHM15 - 613□ - (B) - Ratio | 11    | 4   | 680      | 323 | 211 | 251 | 104    | 775        | 323 | 211 | 251 | 121    |
| CHHM1 - 614□ - (B) - Ratio  | 0.75  | 4   | 497      | 268 | 143 | 160 | 52     | 540        | 268 | 143 | 160 | 55     |
| CHHM1H - 614□ - (B) - Ratio | 1.1   | 4   | 530      | 268 | 148 | 169 | 56     | 592        | 268 | 148 | 169 | 61     |
| CHHM2 - 614□ - (B) - Ratio  | 1.5   | 4   | 530      | 268 | 148 | 169 | 56     | 592        | 268 | 148 | 169 | 61     |
| CHHM3 - 614□ - (B) - Ratio  | 2.2   | 4   | 550      | 274 | 155 | 182 | 59     | 613        | 274 | 155 | 182 | 66     |
| CHHM4 - 614□ - (B) - Ratio  | 3.0   | 4   | 573      | 296 | 166 | 222 | 69     | 645        | 296 | 166 | 222 | 79     |
| CHHM5 - 614□ - (B) - Ratio  | 3.7   | 4   | 573      | 296 | 166 | 222 | 69     | 645        | 296 | 166 | 222 | 79     |
| CHHM8 - 614□ - (B) - Ratio  | 5.5   | 4   | 617      | 296 | 166 | 222 | 76     | 689        | 296 | 166 | 222 | 86     |
| CHHM10 - 614□ - (B) - Ratio | 7.5   | 4   | 640      | 323 | 211 | 251 | 91     | 735        | 323 | 211 | 251 | 109    |
| CHHM15 - 614□ - (B) - Ratio | 11    | 4   | 700      | 323 | 211 | 251 | 104    | 795        | 323 | 211 | 251 | 122    |
| CHHM20 - 614□ - (B) - Ratio | 15    | 4   | 790      | 358 | 261 | 324 | 156    | 895        | 321 | 261 | 324 | 190    |

Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 616□ to 617□

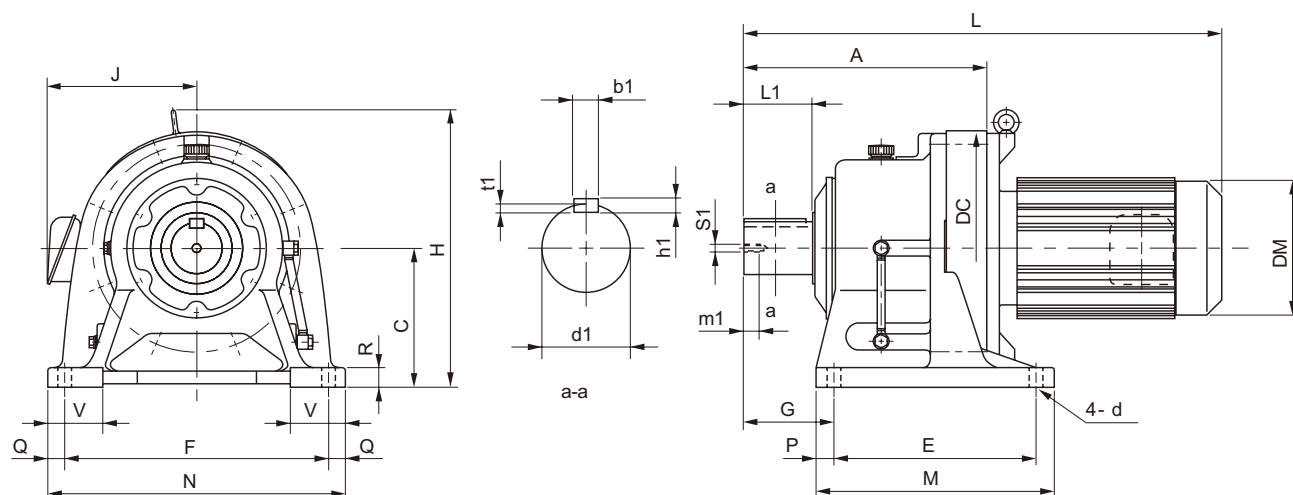
| Frame size<br><div>Note: 4</div> | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V  | d  | Output Shaft <div>Note: 2, 3, 6</div> |    |    |    |     |     |    |
|----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|---------------------------------------|----|----|----|-----|-----|----|
|                                  | d1  | L1  | b1  | h1  | t1  | S1  | m1  |     |    |    |    |    |    |                                       |    |    |    |     |     |    |
| 616 <div></div>                  | 308 | 160 | 300 | 150 | 370 | 139 | 238 | 410 | 44 | 20 | 25 | 75 | 18 | 60                                    | 90 | 18 | 11 | 7   | M10 | 18 |
| 617 <div></div>                  | 352 | 200 | 340 | 275 | 380 | 125 | 335 | 430 | 30 | 25 | 30 | 80 | 22 | 70                                    | 90 | 20 | 12 | 7.5 | M12 | 24 |

| Model<br>Note: 4, 5          | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|------------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                              | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHHM1H - 616□ - (B) - Ratio  | 1.1   | 4   | 583      | 310 | 148 | 169 | 93     | 645        | 310 | 148 | 169 | 99     |
| CHHM2 - 616□ - (B) - Ratio   | 1.5   | 4   | 583      | 310 | 148 | 169 | 93     | 645        | 310 | 148 | 169 | 99     |
| CHHM3 - 616□ - (B) - Ratio   | 2.2   | 4   | 598      | 310 | 155 | 182 | 96     | 661        | 310 | 155 | 182 | 103    |
| CHHM4 - 616□ - (B) - Ratio   | 3.0   | 4   | 621      | 310 | 166 | 222 | 105    | 693        | 310 | 166 | 222 | 116    |
| CHHM5 - 616□ - (B) - Ratio   | 3.7   | 4   | 621      | 310 | 166 | 222 | 105    | 693        | 310 | 166 | 222 | 116    |
| CHHM8 - 616□ - (B) - Ratio   | 5.5   | 4   | 665      | 310 | 166 | 222 | 112    | 737        | 310 | 166 | 222 | 123    |
| CHHM10 - 616□ - (B) - Ratio  | 7.5   | 4   | 693      | 333 | 211 | 251 | 128    | 788        | 333 | 211 | 251 | 146    |
| CHHM15 - 616□ - (B) - Ratio  | 11    | 4   | 753      | 333 | 211 | 251 | 142    | 848        | 333 | 211 | 251 | 160    |
| *CHHM20 - 616□ - (B) - Ratio | 15    | 4   | 838      | 368 | 261 | 324 | 195    | 943        | 368 | 261 | 324 | 230    |
| *CHHM25 - 616□ - (B) - Ratio | 18.5  | 4   | 933      | 368 | 340 | 394 | 267    | 1098       | 368 | 340 | 394 | 323    |
| *CHHM30 - 616□ - (B) - Ratio | 22    | 4   | 933      | 368 | 340 | 394 | 267    | 1098       | 368 | 340 | 394 | 323    |
| CHHM4 - 617□ - (B) - Ratio   | 3.0   | 4   | 680      | 403 | 166 | 222 | 146    | 752        | 403 | 166 | 222 | 157    |
| CHHM5 - 617□ - (B) - Ratio   | 3.7   | 4   | 680      | 403 | 166 | 222 | 146    | 752        | 403 | 166 | 222 | 157    |
| CHHM8 - 617□ - (B) - Ratio   | 5.5   | 4   | 724      | 403 | 166 | 222 | 153    | 796        | 403 | 166 | 222 | 164    |
| CHHM10 - 617□ - (B) - Ratio  | 7.5   | 4   | 742      | 403 | 211 | 251 | 168    | 837        | 403 | 211 | 251 | 187    |
| CHHM15 - 617□ - (B) - Ratio  | 11    | 4   | 802      | 403 | 211 | 251 | 182    | 897        | 403 | 211 | 251 | 201    |
| CHHM20 - 617□ - (B) - Ratio  | 15    | 4   | 882      | 413 | 259 | 324 | 236    | 987        | 413 | 259 | 324 | 271    |
| CHHM25 - 617□ - (B) - Ratio  | 18.5  | 4   | 977      | 428 | 340 | 394 | 304    | 1142       | 428 | 340 | 394 | 360    |
| CHHM30 - 617□ - (B) - Ratio  | 22    | 4   | 977      | 428 | 340 | 394 | 304    | 1142       | 428 | 340 | 394 | 360    |
| CHHM40 - 617□ - (B) - Ratio  | 30    | 4   | 977      | 428 | 340 | 394 | 321    | 1142       | 428 | 340 | 394 | 369    |

\*\*\* indicates models with bottom level of the motor lower than the reducer base.  
Refer to pages B-152 and B-153 for center height options.

Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.  
5. "B" after the frame size indicates models equipped with brake.  
6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.  
7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 618□ to 619□

| Frame size<br>Note: 4 | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V  | d  | Output Shaft<br>Note: 2, 3, 6 |     |    |    |    |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-------------------------------|-----|----|----|----|-----|----|
|                       |     |     |     |     |     |     |     |     |    |    |    |    |    | d1                            | L1  | b1 | h1 | t1 | S1  | m1 |
| 618□                  | 389 | 220 | 370 | 320 | 420 | 145 | 380 | 470 | 30 | 25 | 30 | 85 | 22 | 80                            | 110 | 22 | 14 | 9  | M12 | 24 |
| 619□                  | 465 | 250 | 430 | 380 | 480 | 170 | 440 | 530 | 30 | 25 | 35 | 90 | 26 | 95                            | 135 | 25 | 14 | 9  | M20 | 34 |

| Model<br>Note: 4, 5          | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|------------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                              | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHHM4 - 618□ - (B) - Ratio   | 3.0   | 4   | 717      | 438 | 166 | 222 | 184    | 789        | 438 | 166 | 222 | 194    |
| CHHM5 - 618□ - (B) - Ratio   | 3.7   | 4   | 717      | 438 | 166 | 222 | 184    | 789        | 438 | 166 | 222 | 194    |
| CHHM8 - 618□ - (B) - Ratio   | 5.5   | 4   | 761      | 438 | 166 | 222 | 192    | 833        | 438 | 166 | 222 | 202    |
| CHHM10 - 618□ - (B) - Ratio  | 7.5   | 4   | 779      | 438 | 211 | 251 | 207    | 874        | 438 | 211 | 251 | 225    |
| CHHM15 - 618□ - (B) - Ratio  | 11    | 4   | 839      | 438 | 211 | 251 | 221    | 934        | 438 | 211 | 251 | 239    |
| CHHM20 - 618□ - (B) - Ratio  | 15    | 4   | 919      | 438 | 261 | 324 | 281    | 1024       | 438 | 261 | 324 | 310    |
| CHHM25 - 618□ - (B) - Ratio  | 18.5  | 4   | 1014     | 448 | 340 | 394 | 347    | 1179       | 448 | 340 | 394 | 398    |
| CHHM30 - 618□ - (B) - Ratio  | 22    | 4   | 1014     | 448 | 340 | 394 | 347    | 1179       | 448 | 340 | 394 | 398    |
| CHHM40 - 618□ - (B) - Ratio  | 30    | 4   | 1014     | 448 | 340 | 394 | 364    | 1179       | 448 | 340 | 394 | 407    |
| CHHM50 - 618□ - (B) - Ratio  | 37    | 4   | 1129     | 481 | 340 | 394 | 412    | 1344       | 481 | 340 | 394 | 509    |
| CHHM60 - 618□ - (B) - Ratio  | 45    | 4   | 1129     | 481 | 340 | 394 | 412    | 1344       | 481 | 340 | 394 | 509    |
| CHHM8 - 619□ - (B) - Ratio   | 5.5   | 4   | 857      | 511 | 166 | 222 | 266    | 929        | 511 | 166 | 222 | 276    |
| CHHM10 - 619□ - (B) - Ratio  | 7.5   | 4   | 870      | 511 | 211 | 251 | 279    | 965        | 511 | 211 | 251 | 297    |
| CHHM15 - 619□ - (B) - Ratio  | 11    | 4   | 930      | 511 | 211 | 251 | 293    | 1025       | 511 | 211 | 251 | 311    |
| CHHM20 - 619□ - (B) - Ratio  | 15    | 4   | 995      | 467 | 261 | 324 | 346    | 1100       | 467 | 261 | 324 | 381    |
| CHHM25 - 619□ - (B) - Ratio  | 18.5  | 4   | 1090     | 511 | 340 | 394 | 422    | 1255       | 511 | 340 | 394 | 467    |
| CHHM256 - 619□ - (B) - Ratio | 18.5  | 6   | 1090     | 511 | 340 | 394 | 437    | 1255       | 511 | 340 | 394 | 480    |
| CHHM30 - 619□ - (B) - Ratio  | 22    | 4   | 1090     | 511 | 340 | 394 | 422    | 1255       | 511 | 340 | 394 | 467    |
| CHHM40 - 619□ - (B) - Ratio  | 30    | 4   | 1090     | 511 | 340 | 394 | 437    | 1255       | 511 | 340 | 394 | 480    |
| CHHM406 - 619□ - (B) - Ratio | 30    | 6   | 1205     | 511 | 340 | 394 | 475    | 1420       | 511 | 340 | 394 | 572    |
| CHHM50 - 619□ - (B) - Ratio  | 37    | 4   | 1205     | 511 | 340 | 394 | 475    | 1420       | 511 | 340 | 394 | 572    |
| CHHM506 - 619□ - (B) - Ratio | 37    | 6   | 1205     | 511 | 340 | 394 | 475    | 1420       | 511 | 340 | 394 | 572    |
| CHHM60 - 619□ - (B) - Ratio  | 45    | 4   | 1205     | 511 | 340 | 394 | 475    | 1420       | 511 | 340 | 394 | 572    |

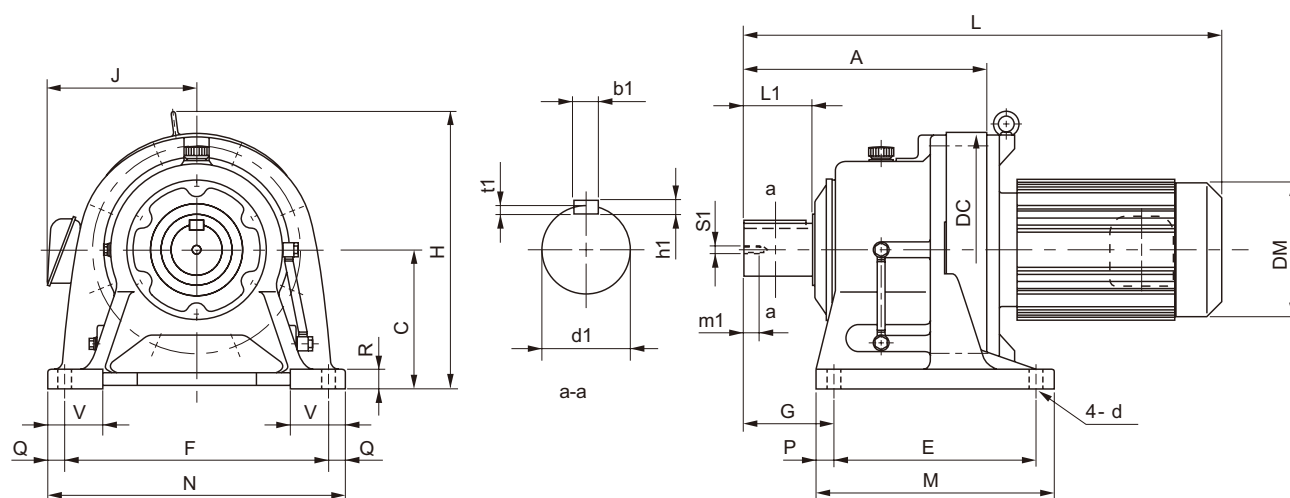
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."



## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 6205 to 6215

| Frame size | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V   | d  | Output Shaft |     |    |    |    |     |    | Note: 2, 3, 6 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|----|--------------|-----|----|----|----|-----|----|---------------|
|            |     |     |     |     |     |     |     |     |    |    |    |     |    | d1           | L1  | b1 | h1 | t1 | S1  | m1 |               |
| 6205       | 502 | 250 | 448 | 360 | 440 | 215 | 440 | 530 | 40 | 45 | 35 | 100 | 26 | 100          | 165 | 28 | 16 | 10 | M20 | 34 |               |
| 6215       | 526 | 265 | 485 | 395 | 480 | 210 | 475 | 580 | 40 | 50 | 40 | 110 | 26 | 110          | 165 | 28 | 16 | 10 | M20 | 34 |               |

| Model   |   |      |       |         | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|---------|---|------|-------|---------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|         |   |      |       |         | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHHM15  | - | 6205 | - (B) | - Ratio | 11    | 4   | 972      | 530 | 211 | 251 | 313    | 1067       | 530 | 211 | 251 | 332    |
| CHHM20  | - | 6205 | - (B) | - Ratio | 15    | 4   | 1042     | 530 | 261 | 324 | 367    | 1147       | 530 | 261 | 324 | 404    |
| CHHM206 | - | 6205 | - (B) | - Ratio | 15    | 6   | 1127     | 530 | 340 | 394 | 438    | 1292       | 530 | 340 | 394 | 484    |
| CHHM25  | - | 6205 | - (B) | - Ratio | 18.5  | 4   | 1127     | 530 | 340 | 394 | 438    | 1292       | 530 | 340 | 394 | 488    |
| CHHM30  | - | 6205 | - (B) | - Ratio | 22    | 4   | 1127     | 530 | 340 | 394 | 438    | 1292       | 530 | 340 | 394 | 488    |
| CHHM306 | - | 6205 | - (B) | - Ratio | 22    | 6   | 1127     | 530 | 340 | 394 | 451    | 1292       | 530 | 340 | 394 | 501    |
| CHHM40  | - | 6205 | - (B) | - Ratio | 30    | 4   | 1127     | 530 | 340 | 394 | 451    | 1292       | 530 | 340 | 394 | 501    |
| CHHM406 | - | 6205 | - (B) | - Ratio | 30    | 6   | 1242     | 530 | 340 | 394 | 489    | 1457       | 530 | 340 | 394 | 588    |
| CHHM50  | - | 6205 | - (B) | - Ratio | 37    | 4   | 1242     | 530 | 340 | 394 | 489    | 1457       | 530 | 340 | 394 | 588    |
| CHHM506 | - | 6205 | - (B) | - Ratio | 37    | 6   | 1242     | 530 | 340 | 394 | 489    | 1457       | 530 | 340 | 394 | 588    |
| CHHM60  | - | 6205 | - (B) | - Ratio | 45    | 4   | 1242     | 530 | 340 | 394 | 489    | 1457       | 530 | 340 | 394 | 588    |
| CHHM606 | - | 6205 | - (B) | - Ratio | 45    | 6   | 1297     | 575 | 390 | 484 | 582    | -          | -   | -   | -   | -      |
| CHHM75  | - | 6205 | - (B) | - Ratio | 55    | 4   | 1297     | 575 | 390 | 484 | 582    | -          | -   | -   | -   | -      |
| CHHM15  | - | 6215 | - (B) | - Ratio | 11    | 4   | 996      | 575 | 211 | 251 | 395    | 1091       | 575 | 211 | 251 | 414    |
| CHHM20  | - | 6215 | - (B) | - Ratio | 15    | 4   | 1066     | 575 | 261 | 324 | 450    | 1171       | 575 | 261 | 324 | 486    |
| CHHM206 | - | 6215 | - (B) | - Ratio | 15    | 6   | 1151     | 575 | 340 | 394 | 515    | 1316       | 575 | 340 | 394 | 565    |
| CHHM25  | - | 6215 | - (B) | - Ratio | 18.5  | 4   | 1151     | 575 | 340 | 394 | 515    | 1316       | 575 | 340 | 394 | 565    |
| CHHM256 | - | 6215 | - (B) | - Ratio | 18.5  | 6   | 1151     | 575 | 340 | 394 | 528    | 1316       | 575 | 340 | 394 | 578    |
| CHHM30  | - | 6215 | - (B) | - Ratio | 22    | 4   | 1151     | 575 | 340 | 394 | 515    | 1316       | 575 | 340 | 394 | 565    |
| CHHM306 | - | 6215 | - (B) | - Ratio | 22    | 6   | 1151     | 575 | 340 | 394 | 528    | 1316       | 575 | 340 | 394 | 578    |
| CHHM40  | - | 6215 | - (B) | - Ratio | 30    | 4   | 1151     | 575 | 340 | 394 | 528    | 1316       | 575 | 340 | 394 | 578    |
| CHHM406 | - | 6215 | - (B) | - Ratio | 30    | 6   | 1266     | 575 | 340 | 394 | 566    | 1481       | 575 | 340 | 394 | 666    |
| CHHM50  | - | 6215 | - (B) | - Ratio | 37    | 4   | 1266     | 575 | 340 | 394 | 566    | 1481       | 575 | 340 | 394 | 666    |
| CHHM506 | - | 6215 | - (B) | - Ratio | 37    | 6   | 1266     | 575 | 340 | 394 | 566    | 1481       | 575 | 340 | 394 | 666    |
| CHHM60  | - | 6215 | - (B) | - Ratio | 45    | 4   | 1266     | 575 | 340 | 394 | 566    | 1481       | 575 | 340 | 394 | 666    |
| CHHM606 | - | 6215 | - (B) | - Ratio | 45    | 6   | 1321     | 575 | 390 | 484 | 676    | -          | -   | -   | -   | -      |
| CHHM75  | - | 6215 | - (B) | - Ratio | 55    | 4   | 1321     | 575 | 390 | 484 | 676    | -          | -   | -   | -   | -      |

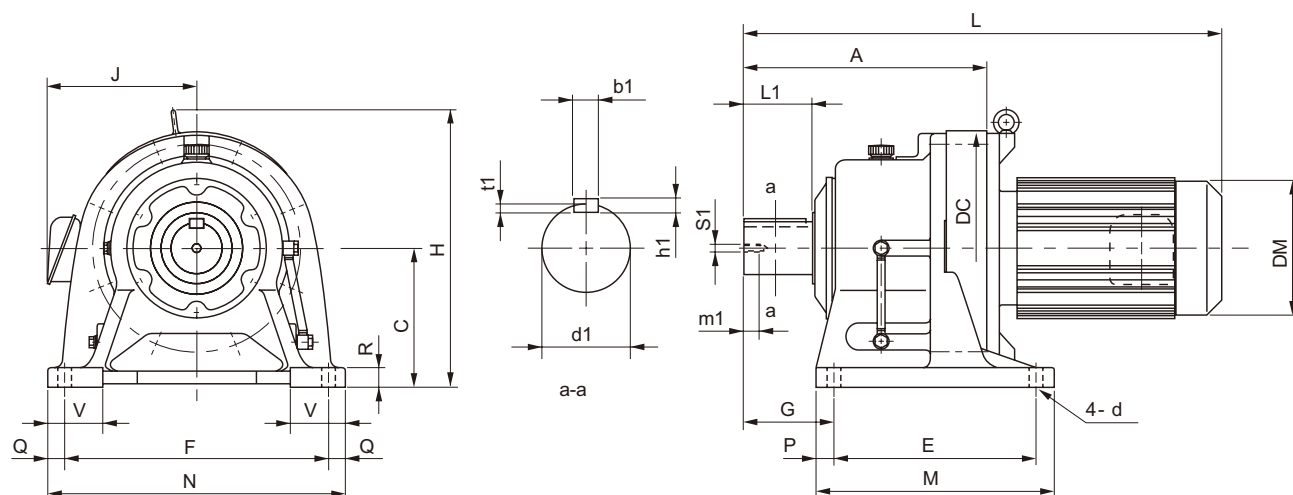
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 6225 to 6235

| Frame size | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V   | d  | Output Shaft |     |    |    |    |     |    | Note: 2, 3, 5 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|----|--------------|-----|----|----|----|-----|----|---------------|
|            | d1  | L1  | b1  | h1  | t1  | S1  | m1  |     |    |    |    |     |    |              |     |    |    |    |     |    |               |
| 6225       | 566 | 280 | 526 | 420 | 540 | 230 | 520 | 620 | 50 | 40 | 40 | 115 | 33 | 120          | 165 | 32 | 18 | 11 | M20 | 34 |               |
| 6235       | 628 | 300 | 562 | 460 | 580 | 260 | 560 | 670 | 50 | 45 | 45 | 120 | 33 | 130          | 200 | 32 | 18 | 11 | M24 | 41 |               |

| Model                        | Note: 4 | Motor |     | Standard |     |     |     |        |  | With Brake |     |     |     |        |
|------------------------------|---------|-------|-----|----------|-----|-----|-----|--------|--|------------|-----|-----|-----|--------|
|                              |         | [kW]  | [P] | L        | H   | J   | DM  | W [kg] |  | L          | H   | J   | DM  | W [kg] |
| CHHM206 - 6225 - (B) - Ratio |         | 15    | 6   | 1191     | 610 | 340 | 394 | 600    |  | 1356       | 610 | 340 | 394 | 650    |
| CHHM25 - 6225 - (B) - Ratio  |         | 18.5  | 4   | 1191     | 610 | 340 | 394 | 600    |  | 1356       | 610 | 340 | 394 | 650    |
| CHHM256 - 6225 - (B) - Ratio |         | 18.5  | 6   | 1191     | 610 | 340 | 394 | 613    |  | 1356       | 610 | 340 | 394 | 663    |
| CHHM30 - 6225 - (B) - Ratio  |         | 22    | 4   | 1191     | 610 | 340 | 394 | 600    |  | 1356       | 610 | 340 | 394 | 650    |
| CHHM306 - 6225 - (B) - Ratio |         | 22    | 6   | 1191     | 610 | 340 | 394 | 613    |  | 1356       | 610 | 340 | 394 | 663    |
| CHHM40 - 6225 - (B) - Ratio  |         | 30    | 4   | 1191     | 610 | 340 | 394 | 613    |  | 1356       | 610 | 340 | 394 | 663    |
| CHHM406 - 6225 - (B) - Ratio |         | 30    | 6   | 1306     | 610 | 340 | 394 | 651    |  | 1521       | 610 | 340 | 394 | 751    |
| CHHM50 - 6225 - (B) - Ratio  |         | 37    | 4   | 1306     | 610 | 340 | 394 | 651    |  | 1521       | 610 | 340 | 394 | 751    |
| CHHM506 - 6225 - (B) - Ratio |         | 37    | 6   | 1306     | 610 | 340 | 394 | 651    |  | 1521       | 610 | 340 | 394 | 751    |
| CHHM60 - 6225 - (B) - Ratio  |         | 45    | 4   | 1306     | 610 | 340 | 394 | 651    |  | 1521       | 610 | 340 | 394 | 751    |
| CHHM606 - 6225 - (B) - Ratio |         | 45    | 6   | 1361     | 610 | 390 | 484 | 750    |  | -          | -   | -   | -   | -      |
| CHHM75 - 6225 - (B) - Ratio  |         | 55    | 4   | 1361     | 610 | 390 | 484 | 750    |  | -          | -   | -   | -   | -      |
| CHHM206 - 6235 - (B) - Ratio |         | 15    | 6   | 1253     | 667 | 340 | 394 | 698    |  | 1418       | 667 | 340 | 394 | 734    |
| CHHM256 - 6235 - (B) - Ratio |         | 18.5  | 6   | 1253     | 667 | 340 | 394 | 698    |  | 1418       | 667 | 340 | 394 | 748    |
| CHHM306 - 6235 - (B) - Ratio |         | 22    | 6   | 1253     | 667 | 340 | 394 | 698    |  | 1418       | 667 | 340 | 394 | 748    |
| CHHM406 - 6235 - (B) - Ratio |         | 30    | 6   | 1368     | 667 | 340 | 394 | 744    |  | 1583       | 667 | 340 | 394 | 837    |
| CHHM506 - 6235 - (B) - Ratio |         | 37    | 6   | 1368     | 667 | 340 | 394 | 744    |  | 1583       | 667 | 340 | 394 | 837    |
| CHHM606 - 6235 - (B) - Ratio |         | 45    | 6   | 1423     | 667 | 390 | 484 | 833    |  | -          | -   | -   | -   | -      |
| CHHM756 - 6235 - (B) - Ratio |         | 55    | 6   | 1503     | 667 | 390 | 485 | 887    |  | -          | -   | -   | -   | -      |

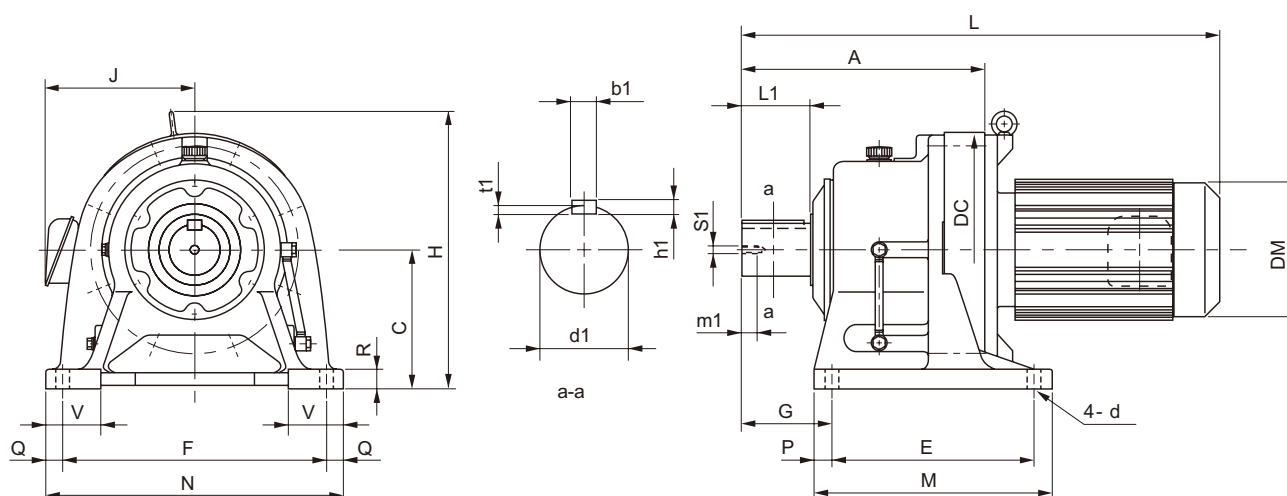
Note: 1. [ ] indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

# Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

## CHHM - 6245 to 6265



GEARMOTORS

Dimension Tables  
CHHM

| Frame size | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V   | d  | Output Shaft <span style="float: right;">Note: 2, 3, 5</span> |     |    |    |    |     |    |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|----|---------------------------------------------------------------|-----|----|----|----|-----|----|
|            |     |     |     |     |     |     |     |     |    |    |    |     |    | d1                                                            | L1  | b1 | h1 | t1 | S1  | m1 |
| 6245       | 657 | 335 | 614 | 480 | 630 | 263 | 580 | 720 | 50 | 45 | 45 | 128 | 39 | 140                                                           | 200 | 36 | 20 | 12 | M24 | 41 |
| 6255       | 775 | 375 | 670 | 520 | 670 | 320 | 630 | 780 | 55 | 55 | 50 | 140 | 39 | 160                                                           | 240 | 40 | 22 | 13 | M30 | 49 |
| 6265       | 892 | 400 | 736 | 590 | 770 | 390 | 700 | 880 | 55 | 55 | 55 | 160 | 45 | 170                                                           | 300 | 40 | 22 | 13 | M30 | 49 |

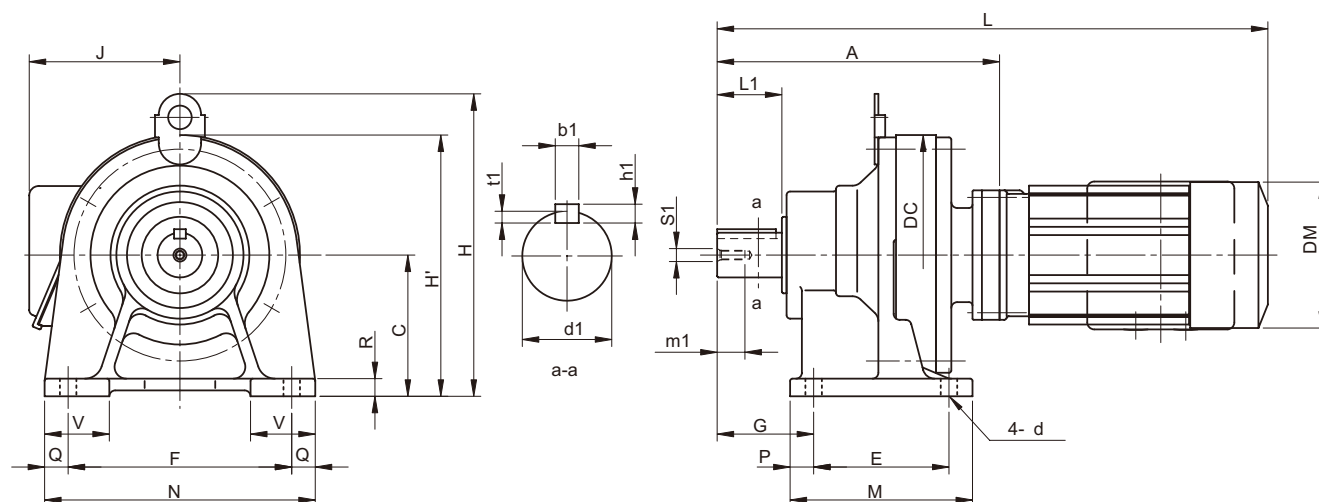
| Model                        | Note: 4 | Motor |     | Standard |     |     |     |        |      |     | With Brake |     |        |      |     |
|------------------------------|---------|-------|-----|----------|-----|-----|-----|--------|------|-----|------------|-----|--------|------|-----|
|                              |         | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L    | H   | J          | DM  | W [kg] | L    | H   |
| CHHM206 - 6245 - (B) - Ratio |         | 15    | 6   | 1282     | 729 | 340 | 394 | 824    | 1447 | 729 | 340        | 394 | 857    | 1447 | 729 |
| CHHM256 - 6245 - (B) - Ratio |         | 18.5  | 6   | 1282     | 729 | 340 | 394 | 824    | 1447 | 729 | 340        | 394 | 871    | 1447 | 729 |
| CHHM306 - 6245 - (B) - Ratio |         | 22    | 6   | 1282     | 729 | 340 | 394 | 824    | 1447 | 729 | 340        | 394 | 871    | 1447 | 729 |
| CHHM406 - 6245 - (B) - Ratio |         | 30    | 6   | 1397     | 729 | 340 | 394 | 870    | 1612 | 729 | 340        | 394 | 958    | 1612 | 729 |
| CHHM506 - 6245 - (B) - Ratio |         | 37    | 6   | 1397     | 729 | 340 | 394 | 870    | 1612 | 729 | 340        | 394 | 958    | 1612 | 729 |
| CHHM606 - 6245 - (B) - Ratio |         | 45    | 6   | 1452     | 729 | 390 | 484 | 961    | -    | -   | -          | -   | -      | -    | -   |
| CHHM756 - 6245 - (B) - Ratio |         | 55    | 6   | 1532     | 729 | 390 | 485 | 1010   | -    | -   | -          | -   | -      | -    | -   |
| CHHM206 - 6255 - (B) - Ratio |         | 15    | 6   | 1400     | 815 | 340 | 394 | 1155   | 1565 | 815 | 340        | 394 | 1188   | 1565 | 815 |
| CHHM256 - 6255 - (B) - Ratio |         | 18.5  | 6   | 1400     | 815 | 340 | 394 | 1155   | 1565 | 815 | 340        | 394 | 1202   | 1565 | 815 |
| CHHM306 - 6255 - (B) - Ratio |         | 22    | 6   | 1400     | 815 | 340 | 394 | 1155   | 1565 | 815 | 340        | 394 | 1202   | 1565 | 815 |
| CHHM406 - 6255 - (B) - Ratio |         | 30    | 6   | 1515     | 815 | 340 | 394 | 1200   | 1730 | 815 | 340        | 394 | 1288   | 1730 | 815 |
| CHHM506 - 6255 - (B) - Ratio |         | 37    | 6   | 1515     | 815 | 340 | 394 | 1200   | 1730 | 815 | 340        | 394 | 1288   | 1730 | 815 |
| CHHM606 - 6255 - (B) - Ratio |         | 45    | 6   | 1570     | 815 | 390 | 484 | 1280   | -    | -   | -          | -   | -      | -    | -   |
| CHHM756 - 6255 - (B) - Ratio |         | 55    | 6   | 1650     | 815 | 390 | 485 | 1335   | -    | -   | -          | -   | -      | -    | -   |
| CHHM306 - 6265 - (B) - Ratio |         | 22    | 6   | 1517     | 874 | 340 | 394 | 1400   | 1727 | 874 | 340        | 394 | 1447   | 1727 | 874 |
| CHHM406 - 6265 - (B) - Ratio |         | 30    | 6   | 1632     | 874 | 340 | 394 | 1445   | 1847 | 874 | 340        | 394 | 1533   | 1847 | 874 |
| CHHM506 - 6265 - (B) - Ratio |         | 37    | 6   | 1632     | 874 | 340 | 394 | 1445   | 1847 | 874 | 340        | 394 | 1533   | 1847 | 874 |
| CHHM606 - 6265 - (B) - Ratio |         | 45    | 6   | 1687     | 874 | 390 | 484 | 1540   | -    | -   | -          | -   | -      | -    | -   |

Note: 4. "B" after the frame size indicates models equipped with brake.

5. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

6. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Universal Direction, Foot-Mount)

CNHM<sup>Note: 1</sup> - 606□DA to 612□DB

| Frame size<br>Note: 4 | A   | C   | DC  | E   | F   | G  | M   | N   | P  | Q  | R  | V  | d  | Output Shaft<br>Note: 2, 3, 6 |    |    |    |     |    |    |
|-----------------------|-----|-----|-----|-----|-----|----|-----|-----|----|----|----|----|----|-------------------------------|----|----|----|-----|----|----|
|                       |     |     |     |     |     |    |     |     |    |    |    |    |    | d1                            | L1 | b1 | h1 | t1  | S1 | m1 |
| 606□DA                | 125 | 80  | 110 | 60  | 120 | 41 | 84  | 144 | 12 | 12 | 10 | 48 | 9  | 14                            | 25 | 5  | 5  | 3   | M5 | 16 |
| 607□DA                | 131 | 80  | 110 | 60  | 120 | 47 | 84  | 144 | 12 | 12 | 10 | 48 | 9  | 18                            | 30 | 6  | 6  | 3.5 | M6 | 16 |
| 609□DA                | 190 | 100 | 150 | 90  | 150 | 60 | 135 | 180 | 15 | 15 | 12 | 49 | 11 | 28                            | 35 | 8  | 7  | 4   | M8 | 20 |
| 610□DA                | 204 | 100 | 150 | 90  | 150 | 60 | 135 | 180 | 15 | 15 | 12 | 65 | 11 | 28                            | 35 | 8  | 7  | 4   | M8 | 20 |
| 612□DA                | 240 | 120 | 204 | 115 | 190 | 82 | 155 | 230 | 20 | 20 | 15 | 55 | 14 | 38                            | 55 | 10 | 8  | 5   | M8 | 20 |
| 612□DB                | 252 | 120 | 204 | 115 | 190 | 82 | 155 | 230 | 20 | 20 | 15 | 55 | 14 | 38                            | 55 | 10 | 8  | 5   | M8 | 20 |

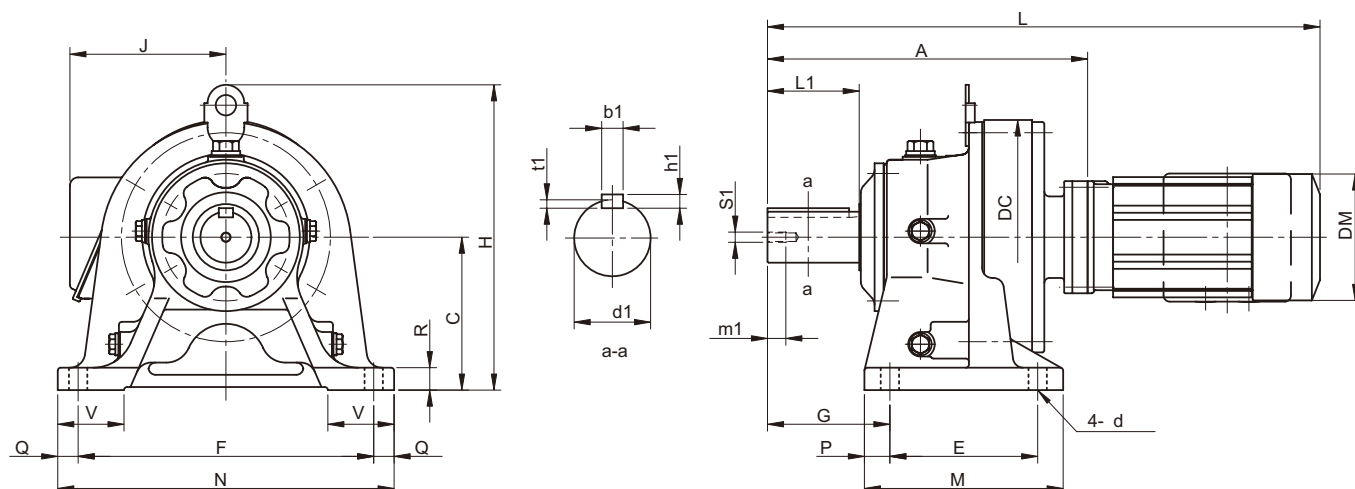
| Model<br>Note: 4, 5           | Motor |     | Standard |     |     |     |     |        |  | With Brake |     |     |     |     |        |  |
|-------------------------------|-------|-----|----------|-----|-----|-----|-----|--------|--|------------|-----|-----|-----|-----|--------|--|
|                               | [kW]  | [P] | L        | H   | H'  | J   | DM  | W [kg] |  | L          | H   | H'  | J   | DM  | W [kg] |  |
| CNHM01 - 606□DA - (B) - Ratio | 0.1   | 4   | 287      | -   | 140 | 113 | 119 | 9      |  | 294        | -   | 138 | 113 | 124 | 10     |  |
| CNHM01 - 607□DA - (B) - Ratio | 0.1   | 4   | 293      | -   | 140 | 113 | 119 | 9      |  | 300        | -   | 138 | 113 | 124 | 10     |  |
| CNHM02 - 607□DA - (B) - Ratio | 0.2   | 4   | 311      | -   | 140 | 113 | 124 | 10     |  | 339        | -   | 138 | 113 | 124 | 11     |  |
| CNHM01 - 609□DA - (B) - Ratio | 0.1   | 4   | 352      | 207 | -   | 113 | 119 | 17     |  | 359        | 207 | -   | 113 | 124 | 18     |  |
| CNHM02 - 609□DA - (B) - Ratio | 0.2   | 4   | 370      | 207 | -   | 113 | 124 | 18     |  | 398        | 207 | -   | 113 | 124 | 19     |  |
| CNHM03 - 609□DA - (B) - Ratio | 0.25  | 4   | 370      | 207 | -   | 113 | 124 | 18     |  | 398        | 207 | -   | 113 | 124 | 19     |  |
| CNHM05 - 609□DA - (B) - Ratio | 0.4   | 4   | 386      | 207 | -   | 113 | 124 | 19     |  | 418        | 207 | -   | 113 | 124 | 20     |  |
| CNHM01 - 610□DA - (B) - Ratio | 0.1   | 4   | 366      | 207 | -   | 113 | 119 | 19     |  | 373        | 207 | -   | 113 | 124 | 20     |  |
| CNHM02 - 610□DA - (B) - Ratio | 0.2   | 4   | 384      | 207 | -   | 113 | 124 | 20     |  | 412        | 207 | -   | 113 | 124 | 21     |  |
| CNHM03 - 610□DA - (B) - Ratio | 0.25  | 4   | 384      | 207 | -   | 113 | 124 | 20     |  | 412        | 207 | -   | 113 | 124 | 21     |  |
| CNHM05 - 610□DA - (B) - Ratio | 0.4   | 4   | 400      | 207 | -   | 113 | 124 | 21     |  | 432        | 207 | -   | 113 | 124 | 22     |  |
| CNHM01 - 612□DA - (B) - Ratio | 0.1   | 4   | 402      | 257 | -   | 113 | 119 | 30     |  | 409        | 257 | -   | 113 | 124 | 31     |  |
| CNHM02 - 612□DA - (B) - Ratio | 0.2   | 4   | 420      | 257 | -   | 113 | 124 | 31     |  | 448        | 257 | -   | 113 | 124 | 32     |  |
| CNHM03 - 612□DA - (B) - Ratio | 0.25  | 4   | 420      | 257 | -   | 113 | 124 | 31     |  | 448        | 257 | -   | 113 | 124 | 32     |  |
| CNHM05 - 612□DA - (B) - Ratio | 0.4   | 4   | 436      | 257 | -   | 113 | 124 | 32     |  | 468        | 257 | -   | 113 | 124 | 33     |  |
| CNHM01 - 612□DB - (B) - Ratio | 0.1   | 4   | 414      | 257 | -   | 113 | 119 | 33     |  | 421        | 257 | -   | 113 | 124 | 35     |  |
| CNHM02 - 612□DB - (B) - Ratio | 0.2   | 4   | 432      | 257 | -   | 113 | 124 | 34     |  | 473        | 257 | -   | 113 | 124 | 36     |  |
| CNHM03 - 612□DB - (B) - Ratio | 0.25  | 4   | 432      | 257 | -   | 113 | 124 | 34     |  | 473        | 257 | -   | 113 | 124 | 36     |  |
| CNHM05 - 612□DB - (B) - Ratio | 0.4   | 4   | 448      | 257 | -   | 113 | 124 | 35     |  | 473        | 257 | -   | 113 | 124 | 37     |  |
| CNHM08 - 612□DB - (B) - Ratio | 0.55  | 4   | 489      | 257 | -   | 143 | 160 | 39     |  | 532        | 257 | -   | 143 | 160 | 42     |  |
| CNHM1 - 612□DB - (B) - Ratio  | 0.75  | 4   | 489      | 257 | -   | 143 | 160 | 39     |  | 532        | 257 | -   | 143 | 160 | 42     |  |
| CNHM1H - 612□DB - (B) - Ratio | 1.1   | 4   | 516      | 257 | -   | 148 | 169 | 42     |  | 578        | 257 | -   | 148 | 169 | 47     |  |
| CNHM2 - 612□DB - (B) - Ratio  | 1.5   | 4   | 516      | 257 | -   | 148 | 169 | 42     |  | 578        | 257 | -   | 148 | 169 | 47     |  |

Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note 1</sup> - 613□DA to 614□DC

| Frame size<br><small>Note: 4</small> | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V  | d  | Output Shaft<br><small>Note: 2, 3, 6</small> |    |    |    |     |     |    |  |
|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----------------------------------------------|----|----|----|-----|-----|----|--|
|                                      |     |     |     |     |     |     |     |     |    |    |    |    |    | d1                                           | L1 | b1 | h1 | t1  | S1  | m1 |  |
| 613□DA                               | 294 | 150 | 230 | 145 | 290 | 100 | 195 | 330 | 25 | 20 | 22 | 65 | 18 | 50                                           | 70 | 14 | 9  | 5.5 | M10 | 18 |  |
| 613□DB                               | 303 | 150 | 230 | 145 | 290 | 100 | 195 | 330 | 25 | 20 | 22 | 65 | 18 | 50                                           | 70 | 14 | 9  | 5.5 | M10 | 18 |  |
| 613□DC                               | 317 | 150 | 230 | 145 | 290 | 100 | 195 | 330 | 25 | 20 | 22 | 65 | 18 | 50                                           | 70 | 14 | 9  | 5.5 | M10 | 18 |  |
| 614□DA                               | 314 | 150 | 230 | 145 | 290 | 120 | 195 | 330 | 25 | 20 | 22 | 65 | 18 | 50                                           | 90 | 14 | 9  | 5.5 | M10 | 18 |  |
| 614□DB                               | 323 | 150 | 230 | 145 | 290 | 120 | 195 | 330 | 25 | 20 | 22 | 65 | 18 | 50                                           | 90 | 14 | 9  | 5.5 | M10 | 18 |  |
| 614□DC                               | 337 | 150 | 230 | 145 | 290 | 120 | 195 | 330 | 25 | 20 | 22 | 65 | 18 | 50                                           | 90 | 14 | 9  | 5.5 | M10 | 18 |  |

| Model<br><small>Note: 4, 5</small> | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                                    | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHHM02 - 613□DA - (B) - Ratio      | 0.2   | 4   | 474      | 300 | 113 | 124 | 47     | 502        | 300 | 113 | 124 | 47     |
| CHHM03 - 613□DA - (B) - Ratio      | 0.25  | 4   | 474      | 300 | 113 | 124 | 48     | 522        | 300 | 113 | 124 | 49     |
| CHHM05 - 613□DA - (B) - Ratio      | 0.4   | 4   | 490      | 300 | 113 | 124 | 48     | 522        | 300 | 113 | 124 | 49     |
| CHHM02 - 613□DB - (B) - Ratio      | 0.2   | 4   | 483      | 300 | 113 | 124 | 49     | 511        | 300 | 113 | 124 | 51     |
| CHHM03 - 613□DB - (B) - Ratio      | 0.25  | 4   | 483      | 300 | 113 | 124 | 49     | 511        | 300 | 113 | 124 | 51     |
| CHHM05 - 613□DB - (B) - Ratio      | 0.4   | 4   | 499      | 300 | 113 | 124 | 50     | 531        | 300 | 113 | 124 | 52     |
| CHHM08 - 613□DB - (B) - Ratio      | 0.55  | 4   | 540      | 263 | 143 | 160 | 54     | 583        | 263 | 143 | 160 | 57     |
| CHHM1 - 613□DB - (B) - Ratio       | 0.75  | 4   | 540      | 263 | 143 | 160 | 54     | 583        | 263 | 143 | 160 | 57     |
| CHHM1H - 613□DB - (B) - Ratio      | 1.1   | 4   | 573      | 270 | 148 | 169 | 57     | 635        | 270 | 148 | 169 | 62     |
| CHHM2 - 613□DB - (B) - Ratio       | 1.5   | 4   | 573      | 270 | 148 | 169 | 57     | 635        | 270 | 148 | 169 | 62     |
| CHHM08 - 613□DC - (B) - Ratio      | 0.55  | 4   | 554      | 265 | 143 | 160 | 56     | 597        | 265 | 143 | 160 | 59     |
| CHHM1 - 613□DC - (B) - Ratio       | 0.75  | 4   | 554      | 265 | 143 | 160 | 56     | 597        | 265 | 143 | 160 | 59     |
| CHHM2 - 613□DC - (B) - Ratio       | 1.5   | 4   | 587      | 272 | 148 | 169 | 59     | 649        | 272 | 148 | 169 | 64     |
| CHHM3 - 613□DC - (B) - Ratio       | 2.2   | 4   | 607      | 276 | 155 | 182 | 64     | 670        | 276 | 155 | 182 | 70     |
| CHHM02 - 614□DA - (B) - Ratio      | 0.2   | 4   | 494      | 300 | 113 | 124 | 47     | 522        | 300 | 113 | 124 | 48     |
| CHHM03 - 614□DA - (B) - Ratio      | 0.25  | 4   | 494      | 300 | 113 | 124 | 47     | 522        | 300 | 113 | 124 | 48     |
| CHHM05 - 614□DA - (B) - Ratio      | 0.4   | 4   | 510      | 300 | 113 | 124 | 48     | 542        | 300 | 113 | 124 | 49     |
| CHHM02 - 614□DB - (B) - Ratio      | 0.2   | 4   | 503      | 300 | 113 | 124 | 49     | 531        | 300 | 113 | 124 | 51     |
| CHHM03 - 614□DB - (B) - Ratio      | 0.25  | 4   | 503      | 300 | 113 | 124 | 49     | 531        | 300 | 113 | 124 | 51     |
| CHHM05 - 614□DB - (B) - Ratio      | 0.4   | 4   | 519      | 300 | 113 | 124 | 50     | 551        | 300 | 113 | 124 | 52     |
| CHHM08 - 614□DB - (B) - Ratio      | 0.55  | 4   | 560      | 263 | 143 | 160 | 54     | 603        | 263 | 143 | 160 | 57     |
| CHHM1 - 614□DB - (B) - Ratio       | 0.75  | 4   | 560      | 263 | 143 | 160 | 54     | 603        | 263 | 143 | 160 | 57     |
| CHHM1H - 614□DB - (B) - Ratio      | 1.1   | 4   | 593      | 270 | 148 | 169 | 57     | 655        | 270 | 148 | 169 | 62     |
| CHHM2 - 614□DB - (B) - Ratio       | 1.5   | 4   | 593      | 270 | 148 | 169 | 57     | 655        | 270 | 148 | 169 | 62     |
| CHHM08 - 614□DC - (B) - Ratio      | 0.55  | 4   | 574      | 265 | 143 | 160 | 56     | 617        | 265 | 143 | 160 | 59     |
| CHHM1 - 614□DC - (B) - Ratio       | 0.75  | 4   | 574      | 265 | 143 | 160 | 56     | 617        | 265 | 143 | 160 | 59     |
| CHHM1H - 614□DC - (B) - Ratio      | 1.1   | 4   | 607      | 270 | 148 | 169 | 60     | 669        | 270 | 148 | 169 | 65     |
| CHHM2 - 614□DC - (B) - Ratio       | 1.5   | 4   | 607      | 270 | 148 | 169 | 60     | 669        | 270 | 148 | 169 | 65     |
| CHHM3 - 614□DC - (B) - Ratio       | 2.2   | 4   | 627      | 276 | 155 | 182 | 64     | 690        | 276 | 155 | 182 | 70     |

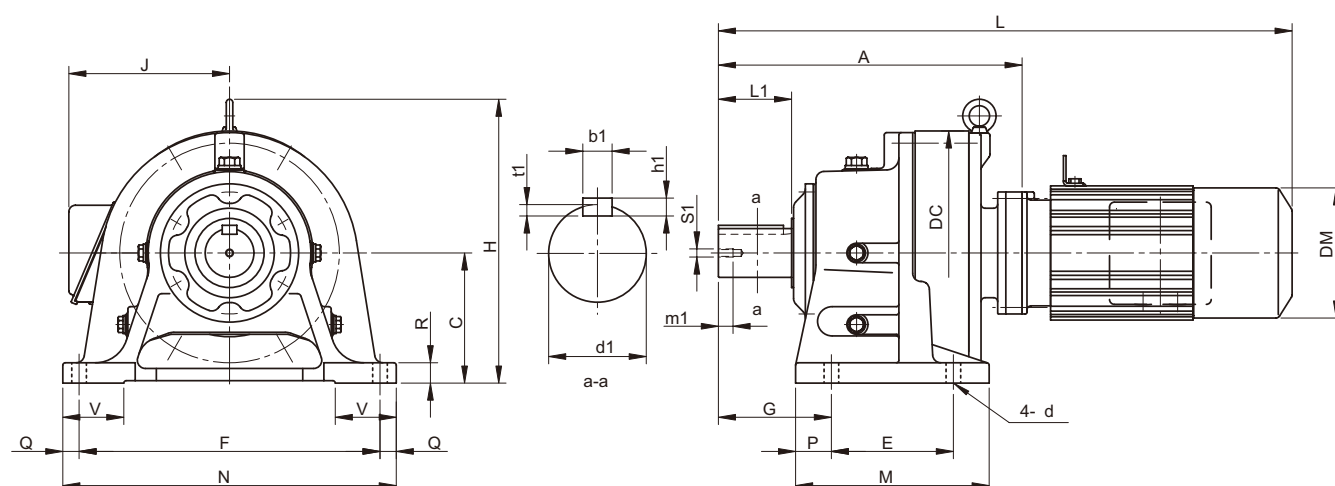
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 616□DA to 618□DA

| Frame size<br>Note: 4 | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V  | d  | Output Shaft<br>Note: 2, 3, 6 |     |    |    |     |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-------------------------------|-----|----|----|-----|-----|----|
|                       |     |     |     |     |     |     |     |     |    |    |    |    |    | d1                            | L1  | b1 | h1 | t1  | S1  | m1 |
| 616□DA                | 373 | 160 | 300 | 150 | 370 | 139 | 238 | 410 | 44 | 20 | 25 | 75 | 18 | 60                            | 90  | 18 | 11 | 7   | M10 | 18 |
| 616□DB                | 387 | 160 | 300 | 150 | 370 | 139 | 238 | 410 | 44 | 20 | 25 | 75 | 18 | 60                            | 90  | 18 | 11 | 7   | M10 | 18 |
| 617□DA                | 418 | 200 | 340 | 275 | 380 | 125 | 335 | 430 | 30 | 25 | 30 | 80 | 22 | 70                            | 90  | 20 | 12 | 7.5 | M12 | 24 |
| 617□DB                | 432 | 200 | 340 | 275 | 380 | 125 | 335 | 430 | 30 | 25 | 30 | 80 | 22 | 70                            | 90  | 20 | 12 | 7.5 | M12 | 24 |
| 618□DA                | 474 | 220 | 370 | 320 | 420 | 145 | 380 | 470 | 30 | 25 | 30 | 85 | 22 | 80                            | 110 | 22 | 14 | 9   | M12 | 24 |

| Model<br>Note: 4, 5           | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                               | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHHM02 - 616□DA - (B) - Ratio | 0.2   | 4   | 553      | 349 | 113 | 124 | 90     | 581        | 349 | 113 | 124 | 92     |
| CHHM03 - 616□DA - (B) - Ratio | 0.25  | 4   | 553      | 349 | 113 | 124 | 90     | 581        | 349 | 113 | 124 | 92     |
| CHHM05 - 616□DA - (B) - Ratio | 0.4   | 4   | 569      | 349 | 113 | 124 | 91     | 601        | 349 | 113 | 124 | 93     |
| CHHM08 - 616□DA - (B) - Ratio | 0.55  | 4   | 610      | 349 | 143 | 160 | 95     | 653        | 349 | 143 | 160 | 98     |
| CHHM1 - 616□DA - (B) - Ratio  | 0.75  | 4   | 610      | 349 | 143 | 160 | 95     | 653        | 349 | 143 | 160 | 98     |
| CHHM1H - 616□DA - (B) - Ratio | 1.1   | 4   | 643      | 349 | 148 | 169 | 99     | 705        | 349 | 148 | 169 | 104    |
| CHHM2 - 616□DA - (B) - Ratio  | 1.5   | 4   | 643      | 349 | 148 | 169 | 99     | 705        | 349 | 148 | 169 | 104    |
| CHHM08 - 616□DB - (B) - Ratio | 0.55  | 4   | 624      | 349 | 143 | 160 | 97     | 667        | 349 | 143 | 160 | 100    |
| CHHM1 - 616□DB - (B) - Ratio  | 0.75  | 4   | 624      | 349 | 143 | 160 | 97     | 667        | 349 | 143 | 160 | 100    |
| CHHM1H - 616□DB - (B) - Ratio | 1.1   | 4   | 657      | 349 | 148 | 169 | 101    | 719        | 349 | 148 | 169 | 106    |
| CHHM2 - 616□DB - (B) - Ratio  | 1.5   | 4   | 657      | 349 | 148 | 169 | 101    | 719        | 349 | 148 | 169 | 106    |
| CHHM3 - 616□DB - (B) - Ratio  | 2.2   | 4   | 677      | 349 | 155 | 182 | 105    | 740        | 349 | 155 | 182 | 111    |
| CHHM02 - 617□DA - (B) - Ratio | 0.2   | 4   | 598      | 416 | 113 | 124 | 120    | 626        | 416 | 113 | 124 | 127    |
| CHHM03 - 617□DA - (B) - Ratio | 0.25  | 4   | 598      | 416 | 113 | 124 | 120    | 626        | 416 | 113 | 124 | 127    |
| CHHM05 - 617□DA - (B) - Ratio | 0.4   | 4   | 614      | 416 | 113 | 124 | 126    | 646        | 416 | 113 | 124 | 128    |
| CHHM08 - 617□DA - (B) - Ratio | 0.55  | 4   | 655      | 416 | 143 | 160 | 130    | 698        | 416 | 143 | 160 | 133    |
| CHHM1 - 617□DA - (B) - Ratio  | 0.75  | 4   | 655      | 416 | 143 | 160 | 130    | 698        | 416 | 143 | 160 | 133    |
| CHHM1H - 617□DA - (B) - Ratio | 1.1   | 4   | 688      | 416 | 148 | 169 | 133    | 750        | 416 | 148 | 169 | 138    |
| CHHM2 - 617□DA - (B) - Ratio  | 1.5   | 4   | 688      | 416 | 148 | 169 | 133    | 750        | 416 | 148 | 169 | 138    |
| CHHM08 - 617□DB - (B) - Ratio | 0.55  | 4   | 669      | 416 | 143 | 160 | 127    | 712        | 416 | 143 | 160 | 134    |
| CHHM1 - 617□DB - (B) - Ratio  | 0.75  | 4   | 669      | 416 | 143 | 160 | 127    | 712        | 416 | 143 | 160 | 134    |
| CHHM1H - 617□DB - (B) - Ratio | 1.1   | 4   | 702      | 416 | 148 | 169 | 136    | 764        | 416 | 148 | 169 | 141    |
| CHHM2 - 617□DB - (B) - Ratio  | 1.5   | 4   | 702      | 416 | 148 | 169 | 136    | 764        | 416 | 148 | 169 | 141    |
| CHHM3 - 617□DB - (B) - Ratio  | 2.2   | 4   | 722      | 416 | 155 | 182 | 140    | 785        | 416 | 155 | 182 | 146    |
| CHHM05 - 618□DA - (B) - Ratio | 0.4   | 4   | 670      | 451 | 113 | 124 | 171    | 702        | 451 | 113 | 124 | 173    |
| CHHM08 - 618□DA - (B) - Ratio | 0.55  | 4   | 711      | 451 | 143 | 160 | 175    | 754        | 451 | 143 | 160 | 178    |
| CHHM1 - 618□DA - (B) - Ratio  | 0.75  | 4   | 711      | 451 | 143 | 160 | 175    | 754        | 451 | 143 | 160 | 178    |
| CHHM1H - 618□DA - (B) - Ratio | 1.1   | 4   | 744      | 451 | 148 | 169 | 179    | 806        | 451 | 148 | 169 | 184    |
| CHHM2 - 618□DA - (B) - Ratio  | 1.5   | 4   | 744      | 451 | 148 | 169 | 179    | 806        | 451 | 148 | 169 | 184    |
| CHHM3 - 618□DA - (B) - Ratio  | 2.2   | 4   | 764      | 451 | 155 | 182 | 183    | 827        | 451 | 155 | 182 | 189    |

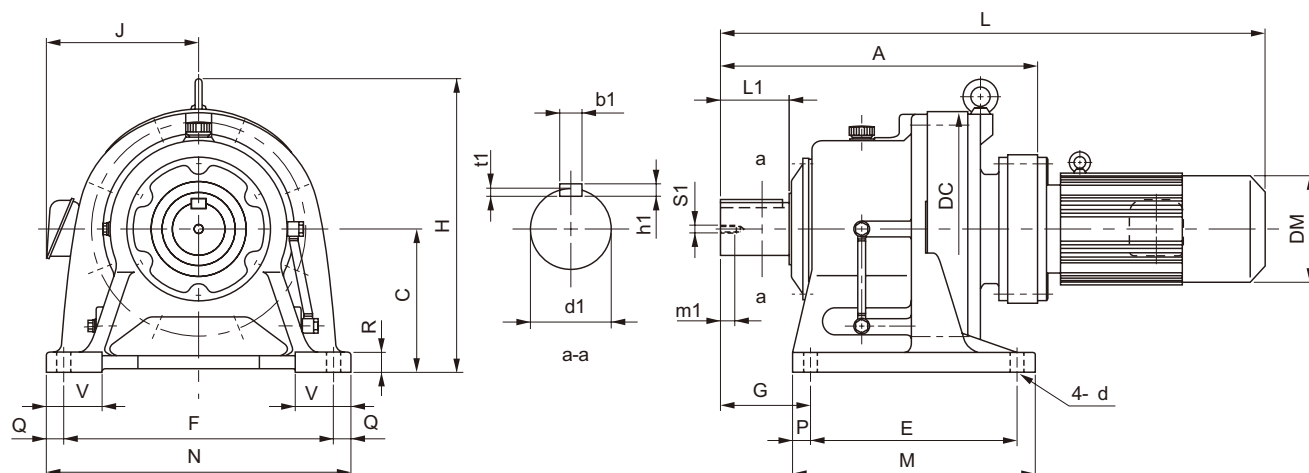
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."



## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 616□DC to 619□DA

| Frame size<br>Note: 4 | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V  | d  | Output Shaft<br>Note: 2, 3, 6 |     |    |    |     |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-------------------------------|-----|----|----|-----|-----|----|
|                       |     |     |     |     |     |     |     |     |    |    |    |    |    | d1                            | L1  | b1 | h1 | t1  | S1  | m1 |
| 616□DC                | 389 | 160 | 300 | 150 | 370 | 139 | 238 | 410 | 44 | 20 | 25 | 75 | 18 | 60                            | 90  | 18 | 11 | 7   | M10 | 18 |
| 617D□C                | 436 | 200 | 340 | 275 | 380 | 125 | 335 | 430 | 30 | 25 | 30 | 80 | 22 | 70                            | 90  | 20 | 12 | 7.5 | M12 | 24 |
| 618□DB                | 496 | 220 | 370 | 320 | 420 | 145 | 380 | 470 | 30 | 25 | 30 | 85 | 22 | 80                            | 110 | 22 | 14 | 9   | M12 | 24 |
| 619□DA                | 556 | 250 | 430 | 380 | 480 | 170 | 440 | 530 | 30 | 25 | 35 | 90 | 26 | 95                            | 135 | 25 | 14 | 9   | M20 | 34 |

| Model<br>Note: 4, 5           | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                               | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHHM1H - 616□DC - (B) - Ratio | 1.1   | 4   | 659      | 349 | 148 | 169 | 107    | 721        | 349 | 148 | 169 | 112    |
| CHHM2 - 616□DC - (B) - Ratio  | 1.5   | 4   | 659      | 349 | 148 | 169 | 107    | 721        | 349 | 148 | 169 | 112    |
| CHHM3 - 616□DC - (B) - Ratio  | 2.2   | 4   | 679      | 349 | 155 | 182 | 111    | 742        | 349 | 155 | 182 | 118    |
| CHHM4 - 616□DC - (B) - Ratio  | 3.0   | 4   | 702      | 349 | 166 | 222 | 121    | 774        | 349 | 166 | 222 | 131    |
| CHHM5 - 616□DC - (B) - Ratio  | 3.7   | 4   | 702      | 349 | 166 | 222 | 121    | 774        | 349 | 166 | 222 | 131    |
| CHHM8 - 616□DC - (B) - Ratio  | 5.5   | 4   | 746      | 349 | 166 | 222 | 128    | 818        | 349 | 166 | 222 | 138    |
| CHHM1H - 617□DC - (B) - Ratio | 1.1   | 4   | 706      | 416 | 148 | 169 | 141    | 768        | 416 | 148 | 169 | 146    |
| CHHM2 - 617□DC - (B) - Ratio  | 1.5   | 4   | 706      | 416 | 148 | 169 | 141    | 768        | 416 | 148 | 169 | 146    |
| CHHM3 - 617□DC - (B) - Ratio  | 2.2   | 4   | 726      | 416 | 155 | 182 | 145    | 789        | 416 | 155 | 182 | 152    |
| CHHM4 - 617□DC - (B) - Ratio  | 3.0   | 4   | 749      | 416 | 166 | 222 | 155    | 821        | 416 | 166 | 222 | 165    |
| CHHM5 - 617□DC - (B) - Ratio  | 3.7   | 4   | 749      | 416 | 166 | 222 | 155    | 821        | 416 | 166 | 222 | 165    |
| CHHM8 - 617□DC - (B) - Ratio  | 5.5   | 4   | 793      | 416 | 166 | 222 | 162    | 865        | 416 | 166 | 222 | 172    |
| CHHM1H - 618□DB - (B) - Ratio | 1.1   | 4   | 766      | 451 | 148 | 169 | 194    | 828        | 451 | 148 | 169 | 199    |
| CHHM2 - 618□DB - (B) - Ratio  | 1.5   | 4   | 766      | 451 | 148 | 169 | 194    | 828        | 451 | 148 | 169 | 199    |
| CHHM3 - 618□DB - (B) - Ratio  | 2.2   | 4   | 786      | 451 | 155 | 182 | 197    | 849        | 451 | 155 | 182 | 204    |
| CHHM4 - 618□DB - (B) - Ratio  | 3.0   | 4   | 809      | 451 | 166 | 222 | 207    | 881        | 451 | 166 | 222 | 217    |
| CHHM5 - 618□DB - (B) - Ratio  | 3.7   | 4   | 809      | 451 | 166 | 222 | 207    | 881        | 451 | 166 | 222 | 217    |
| CHHM8 - 618□DB - (B) - Ratio  | 5.5   | 4   | 853      | 451 | 166 | 222 | 214    | 925        | 451 | 166 | 222 | 224    |
| CHHM10 - 618□DB - (B) - Ratio | 7.5   | 4   | 876      | 451 | 211 | 251 | 229    | 971        | 451 | 211 | 251 | 247    |
| CHHM15 - 618□DB - (B) - Ratio | 11    | 4   | 936      | 451 | 211 | 251 | 243    | 1031       | 451 | 211 | 251 | 261    |
| CHHM1 - 619□DA - (B) - Ratio  | 0.75  | 4   | 793      | 531 | 143 | 160 | 250    | 836        | 531 | 143 | 160 | 253    |
| CHHM1H - 619□DA - (B) - Ratio | 1.1   | 4   | 826      | 531 | 148 | 169 | 254    | 888        | 531 | 148 | 169 | 259    |
| CHHM2 - 619□DA - (B) - Ratio  | 1.5   | 4   | 826      | 531 | 148 | 169 | 254    | 888        | 531 | 148 | 169 | 259    |
| CHHM3 - 619□DA - (B) - Ratio  | 2.2   | 4   | 846      | 531 | 155 | 182 | 258    | 909        | 531 | 155 | 182 | 265    |
| CHHM4 - 619□DA - (B) - Ratio  | 3.0   | 4   | 869      | 531 | 166 | 222 | 268    | 941        | 531 | 166 | 222 | 278    |
| CHHM5 - 619□DA - (B) - Ratio  | 3.7   | 4   | 869      | 531 | 166 | 222 | 268    | 941        | 531 | 166 | 222 | 278    |
| CHHM8 - 619□DA - (B) - Ratio  | 5.5   | 4   | 913      | 531 | 166 | 222 | 275    | 985        | 531 | 166 | 222 | 285    |

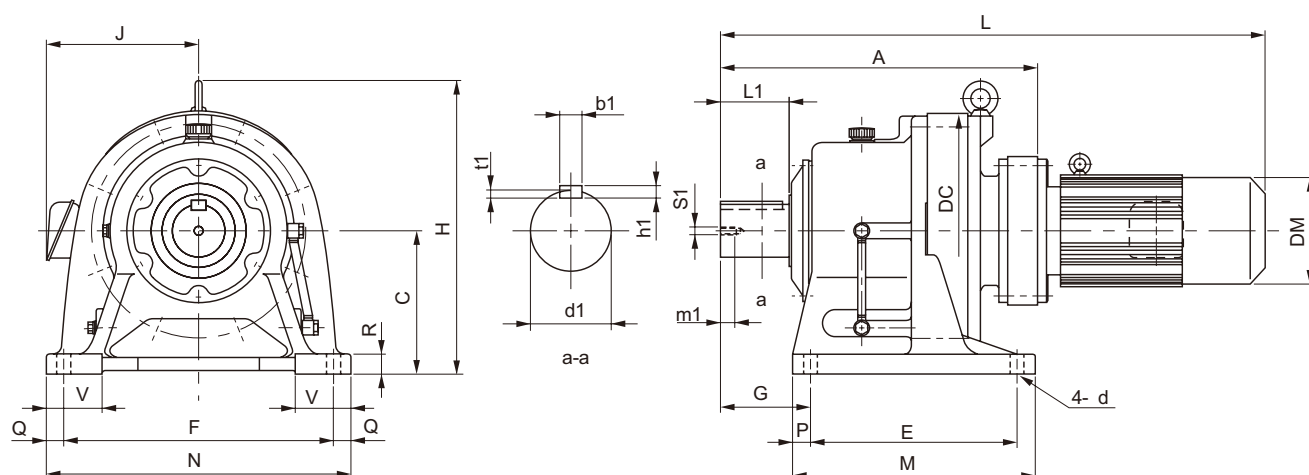
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 619□DB to 6215DA

| Frame size<br>Note: 4 | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V   | d  | Output Shaft<br>Note: 2, 3, 6 |     |    |    |    |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|----|-------------------------------|-----|----|----|----|-----|----|
|                       |     |     |     |     |     |     |     |     |    |    |    |     |    | d1                            | L1  | b1 | h1 | t1 | S1  | m1 |
| 619□DB                | 572 | 250 | 430 | 380 | 480 | 170 | 440 | 530 | 30 | 25 | 35 | 90  | 26 | 95                            | 135 | 25 | 14 | 9  | M20 | 34 |
| 6205DA                | 597 | 250 | 448 | 360 | 440 | 215 | 440 | 530 | 40 | 45 | 35 | 100 | 26 | 100                           | 165 | 28 | 16 | 10 | M20 | 34 |
| 6205DB                | 624 | 250 | 448 | 360 | 440 | 215 | 440 | 530 | 40 | 45 | 35 | 100 | 26 | 100                           | 165 | 28 | 16 | 10 | M20 | 34 |
| 6215DA                | 650 | 265 | 485 | 395 | 480 | 210 | 475 | 580 | 40 | 50 | 40 | 110 | 26 | 110                           | 165 | 28 | 16 | 10 | M20 | 34 |

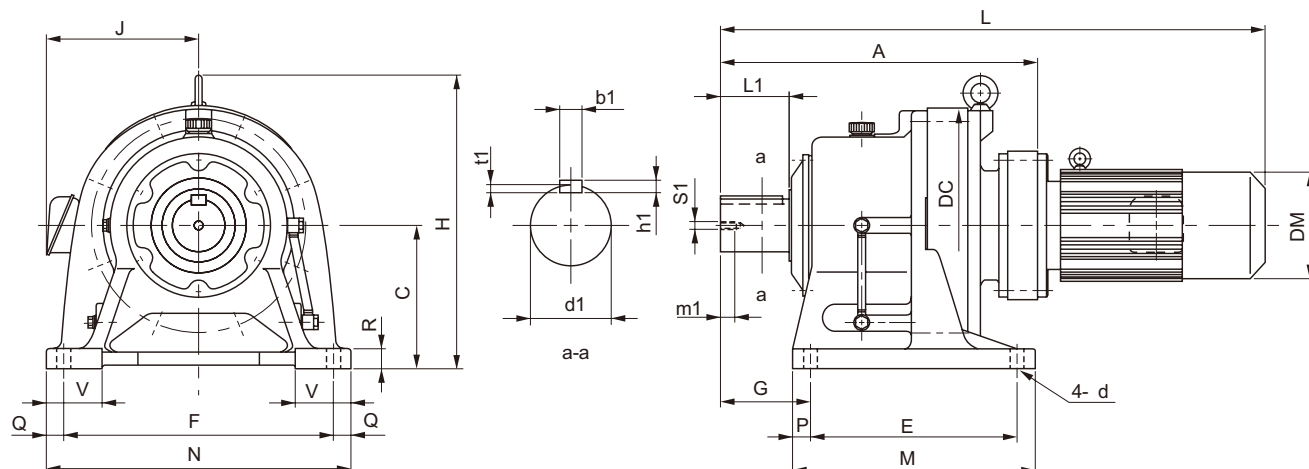
| Model<br>Note: 4, 5           | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                               | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHHM2 - 619□DB - (B) - Ratio  | 1.5   | 4   | 842      | 531 | 148 | 169 | 261    | 904        | 531 | 148 | 169 | 266    |
| CHHM3 - 619□DB - (B) - Ratio  | 2.2   | 4   | 862      | 531 | 155 | 182 | 265    | 925        | 531 | 155 | 182 | 272    |
| CHHM4 - 619□DB - (B) - Ratio  | 3.0   | 4   | 885      | 531 | 166 | 222 | 275    | 957        | 531 | 166 | 222 | 285    |
| CHHM5 - 619□DB - (B) - Ratio  | 3.7   | 4   | 885      | 531 | 166 | 222 | 275    | 957        | 531 | 166 | 222 | 285    |
| CHHM8 - 619□DB - (B) - Ratio  | 5.5   | 4   | 929      | 531 | 166 | 222 | 282    | 1001       | 531 | 166 | 222 | 292    |
| CHHM10 - 619□DB - (B) - Ratio | 7.5   | 4   | 952      | 531 | 211 | 251 | 297    | 1047       | 531 | 211 | 251 | 315    |
| CHHM15 - 619□DB - (B) - Ratio | 11    | 4   | 1012     | 531 | 211 | 251 | 311    | 1107       | 531 | 211 | 251 | 329    |
| CHHM20 - 619□DB - (B) - Ratio | 15    | 4   | 1102     | 531 | 261 | 324 | 363    | 1207       | 531 | 261 | 324 | 397    |
| CHHM1 - 6205DA - (B) - Ratio  | 0.75  | 4   | 834      | 530 | 143 | 160 | 269    | 877        | 530 | 143 | 160 | 272    |
| CHHM2 - 6205DA - (B) - Ratio  | 1.5   | 4   | 867      | 530 | 148 | 169 | 273    | 929        | 530 | 148 | 169 | 278    |
| CHHM3 - 6205DA - (B) - Ratio  | 2.2   | 4   | 887      | 530 | 155 | 182 | 277    | 949        | 530 | 155 | 182 | 284    |
| CHHM4 - 6205DA - (B) - Ratio  | 3.0   | 4   | 910      | 530 | 166 | 222 | 287    | 982        | 530 | 166 | 222 | 297    |
| CHHM5 - 6205DA - (B) - Ratio  | 3.7   | 4   | 910      | 530 | 166 | 222 | 287    | 982        | 530 | 166 | 222 | 297    |
| CHHM8 - 6205DA - (B) - Ratio  | 5.5   | 4   | 954      | 530 | 166 | 222 | 294    | 1026       | 530 | 166 | 222 | 304    |
| CHHM3 - 6205DB - (B) - Ratio  | 2.2   | 4   | 914      | 530 | 155 | 182 | 289    | 977        | 530 | 155 | 182 | 296    |
| CHHM4 - 6205DB - (B) - Ratio  | 3.0   | 4   | 937      | 530 | 166 | 222 | 299    | 1009       | 530 | 166 | 222 | 309    |
| CHHM5 - 6205DB - (B) - Ratio  | 3.7   | 4   | 937      | 530 | 166 | 222 | 299    | 1009       | 530 | 166 | 222 | 309    |
| CHHM8 - 6205DB - (B) - Ratio  | 5.5   | 4   | 981      | 530 | 166 | 222 | 306    | 1053       | 530 | 166 | 222 | 316    |
| CHHM10 - 6205DB - (B) - Ratio | 7.5   | 4   | 1004     | 530 | 211 | 251 | 321    | 1099       | 530 | 211 | 251 | 339    |
| CHHM15 - 6205DB - (B) - Ratio | 11    | 4   | 1064     | 530 | 211 | 251 | 334    | 1159       | 530 | 211 | 251 | 352    |
| CHHM20 - 6205DB - (B) - Ratio | 15    | 4   | 1154     | 530 | 261 | 324 | 386    | 1259       | 530 | 261 | 324 | 419    |
| CHHM2 - 6215DA - (B) - Ratio  | 1.5   | 4   | 920      | 575 | 148 | 169 | 367    | 982        | 575 | 148 | 169 | 372    |
| CHHM3 - 6215DA - (B) - Ratio  | 2.2   | 4   | 940      | 575 | 155 | 182 | 370    | 1003       | 575 | 155 | 182 | 377    |
| CHHM4 - 6215DA - (B) - Ratio  | 3.0   | 4   | 963      | 575 | 166 | 222 | 380    | 1035       | 575 | 166 | 222 | 390    |
| CHHM5 - 6215DA - (B) - Ratio  | 3.7   | 4   | 963      | 575 | 166 | 222 | 380    | 1035       | 575 | 166 | 222 | 390    |
| CHHM8 - 6215DA - (B) - Ratio  | 5.5   | 4   | 1007     | 575 | 166 | 222 | 387    | 1079       | 575 | 166 | 222 | 397    |
| CHHM10 - 6215DA - (B) - Ratio | 7.5   | 4   | 1030     | 575 | 211 | 251 | 402    | 1125       | 575 | 211 | 251 | 420    |
| CHHM15 - 6215DA - (B) - Ratio | 11    | 4   | 1090     | 575 | 211 | 251 | 415    | 1185       | 575 | 211 | 251 | 433    |
| CHHM20 - 6215DA - (B) - Ratio | 15    | 4   | 1180     | 575 | 261 | 324 | 467    | 1285       | 575 | 261 | 324 | 501    |

Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 6215DB to 6225DB

GEARMOTORS

Dimension Tables  
CHHM

| Frame size | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V   | d  | Output Shaft |     |    |    |    |     |    | Note: 2, 3, 6 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|----|--------------|-----|----|----|----|-----|----|---------------|
|            |     |     |     |     |     |     |     |     |    |    |    |     |    | d1           | L1  | b1 | h1 | t1 | S1  | m1 |               |
| 6215DB     | 675 | 265 | 485 | 395 | 480 | 210 | 475 | 580 | 40 | 50 | 40 | 110 | 26 | 110          | 165 | 28 | 16 | 10 | M20 | 34 |               |
| 6225DA     | 692 | 280 | 526 | 420 | 540 | 230 | 520 | 620 | 50 | 40 | 40 | 115 | 33 | 120          | 165 | 32 | 18 | 11 | M20 | 34 |               |
| 6225DB     | 735 | 280 | 526 | 420 | 540 | 230 | 520 | 620 | 50 | 40 | 40 | 115 | 33 | 120          | 165 | 32 | 18 | 11 | M20 | 34 |               |

| Model                         | Note: 5 | Motor |     | Standard |     |     |     |        |      |     | With Brake |     |        |      |     |
|-------------------------------|---------|-------|-----|----------|-----|-----|-----|--------|------|-----|------------|-----|--------|------|-----|
|                               |         | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L    | H   | J          | DM  | W [kg] | L    | H   |
| CHHM5 - 6215DB - (B) - Ratio  |         | 3.7   | 4   | 993      | 575 | 166 | 222 | 399    | 1065 | 575 | 166        | 222 | 409    | 1065 | 575 |
| CHHM8 - 6215DB - (B) - Ratio  |         | 5.5   | 4   | 1037     | 575 | 166 | 222 | 406    | 1109 | 575 | 166        | 222 | 416    | 1109 | 575 |
| CHHM10 - 6215DB - (B) - Ratio |         | 7.5   | 4   | 1060     | 575 | 211 | 251 | 422    | 1155 | 575 | 211        | 251 | 439    | 1155 | 575 |
| CHHM15 - 6215DB - (B) - Ratio |         | 11    | 4   | 1120     | 575 | 211 | 251 | 436    | 1215 | 575 | 211        | 251 | 453    | 1215 | 575 |
| CHHM20 - 6215DB - (B) - Ratio |         | 15    | 4   | 1205     | 575 | 261 | 324 | 489    | 1310 | 575 | 261        | 324 | 523    | 1310 | 575 |
| CHHM25 - 6215DB - (B) - Ratio |         | 18.5  | 4   | 1300     | 575 | 340 | 394 | 564    | 1465 | 575 | 340        | 394 | 615    | 1465 | 575 |
| CHHM30 - 6215DB - (B) - Ratio |         | 22    | 4   | 1300     | 575 | 340 | 394 | 564    | 1465 | 575 | 340        | 394 | 615    | 1465 | 575 |
| CHHM2 - 6225DA - (B) - Ratio  |         | 1.5   | 4   | 962      | 610 | 148 | 169 | 441    | 1024 | 610 | 148        | 169 | 446    | 1024 | 610 |
| CHHM3 - 6225DA - (B) - Ratio  |         | 2.2   | 4   | 982      | 610 | 155 | 182 | 444    | 1045 | 610 | 155        | 182 | 451    | 1045 | 610 |
| CHHM4 - 6225DA - (B) - Ratio  |         | 3.0   | 4   | 1005     | 610 | 166 | 222 | 454    | 1077 | 610 | 166        | 222 | 464    | 1077 | 610 |
| CHHM5 - 6225DA - (B) - Ratio  |         | 3.7   | 4   | 1005     | 610 | 166 | 222 | 454    | 1077 | 610 | 166        | 222 | 464    | 1077 | 610 |
| CHHM8 - 6225DA - (B) - Ratio  |         | 5.5   | 4   | 1049     | 610 | 166 | 222 | 461    | 1121 | 610 | 166        | 222 | 471    | 1121 | 610 |
| CHHM10 - 6225DA - (B) - Ratio |         | 7.5   | 4   | 1072     | 610 | 211 | 251 | 476    | 1167 | 610 | 211        | 251 | 494    | 1167 | 610 |
| CHHM15 - 6225DA - (B) - Ratio |         | 11    | 4   | 1132     | 610 | 211 | 251 | 490    | 1227 | 610 | 211        | 251 | 508    | 1227 | 610 |
| CHHM20 - 6225DA - (B) - Ratio |         | 15    | 4   | 1222     | 610 | 261 | 324 | 542    | 1327 | 610 | 261        | 324 | 576    | 1327 | 610 |
| CHHM5 - 6225DB - (B) - Ratio  |         | 3.7   | 4   | 1058     | 610 | 166 | 222 | 499    | 1130 | 610 | 166        | 222 | 510    | 1130 | 610 |
| CHHM8 - 6225DB - (B) - Ratio  |         | 5.5   | 4   | 1102     | 610 | 166 | 222 | 506    | 1174 | 610 | 166        | 222 | 517    | 1174 | 610 |
| CHHM10 - 6225DB - (B) - Ratio |         | 7.5   | 4   | 1125     | 610 | 211 | 251 | 521    | 1220 | 610 | 211        | 251 | 539    | 1220 | 610 |
| CHHM15 - 6225DB - (B) - Ratio |         | 11    | 4   | 1185     | 610 | 211 | 251 | 535    | 1280 | 610 | 211        | 251 | 553    | 1280 | 610 |
| CHHM20 - 6225DB - (B) - Ratio |         | 15    | 4   | 1265     | 610 | 261 | 324 | 589    | 1370 | 610 | 261        | 324 | 623    | 1370 | 610 |
| CHHM25 - 6225DB - (B) - Ratio |         | 18.5  | 4   | 1360     | 610 | 340 | 394 | 661    | 1525 | 610 | 340        | 394 | 712    | 1525 | 610 |
| CHHM30 - 6225DB - (B) - Ratio |         | 22    | 4   | 1360     | 610 | 340 | 394 | 661    | 1525 | 610 | 340        | 394 | 712    | 1525 | 610 |
| CHHM40 - 6225DB - (B) - Ratio |         | 30    | 4   | 1360     | 610 | 340 | 394 | 678    | 1525 | 610 | 340        | 394 | 729    | 1525 | 610 |

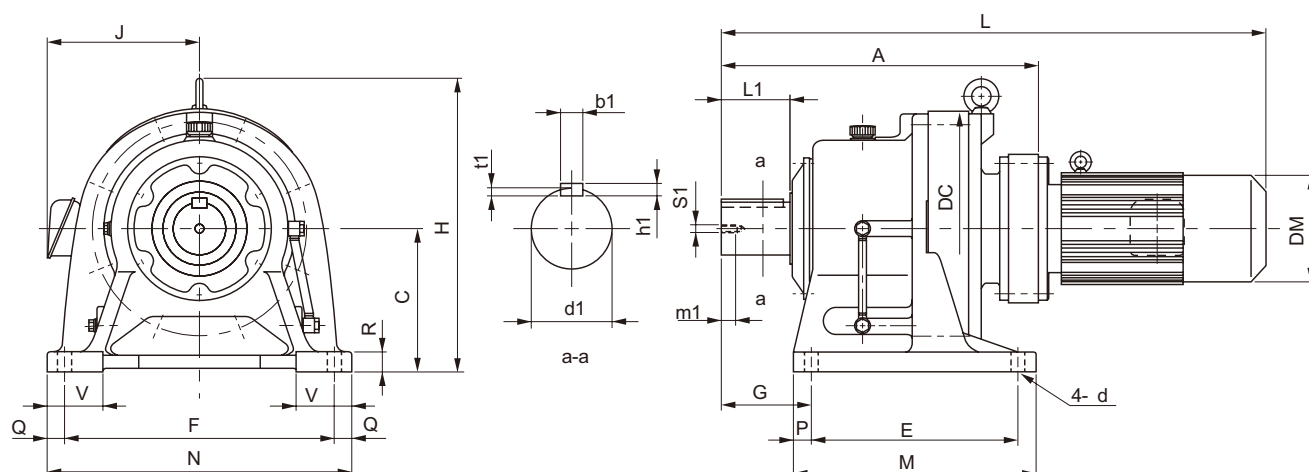
Note: 4. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 6235DA to 6245DB

| Frame size | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V   | d  | Output Shaft |     |    |    |    |     |    | Note: 2, 3, 5 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|----|--------------|-----|----|----|----|-----|----|---------------|
|            |     |     |     |     |     |     |     |     |    |    |    |     |    | d1           | L1  | b1 | h1 | t1 | S1  | m1 |               |
| 6235DA     | 778 | 300 | 562 | 460 | 580 | 260 | 560 | 670 | 50 | 45 | 45 | 120 | 33 | 130          | 200 | 32 | 18 | 11 | M24 | 41 |               |
| 6235DB     | 800 | 300 | 562 | 460 | 580 | 260 | 560 | 670 | 50 | 45 | 45 | 120 | 33 | 130          | 200 | 32 | 18 | 11 | M24 | 41 |               |
| 6245DA     | 816 | 335 | 614 | 480 | 630 | 263 | 580 | 720 | 50 | 45 | 45 | 128 | 39 | 140          | 200 | 36 | 20 | 12 | M24 | 41 |               |
| 6245DB     | 837 | 335 | 614 | 480 | 630 | 263 | 580 | 720 | 50 | 45 | 45 | 128 | 39 | 140          | 200 | 36 | 20 | 12 | M24 | 41 |               |

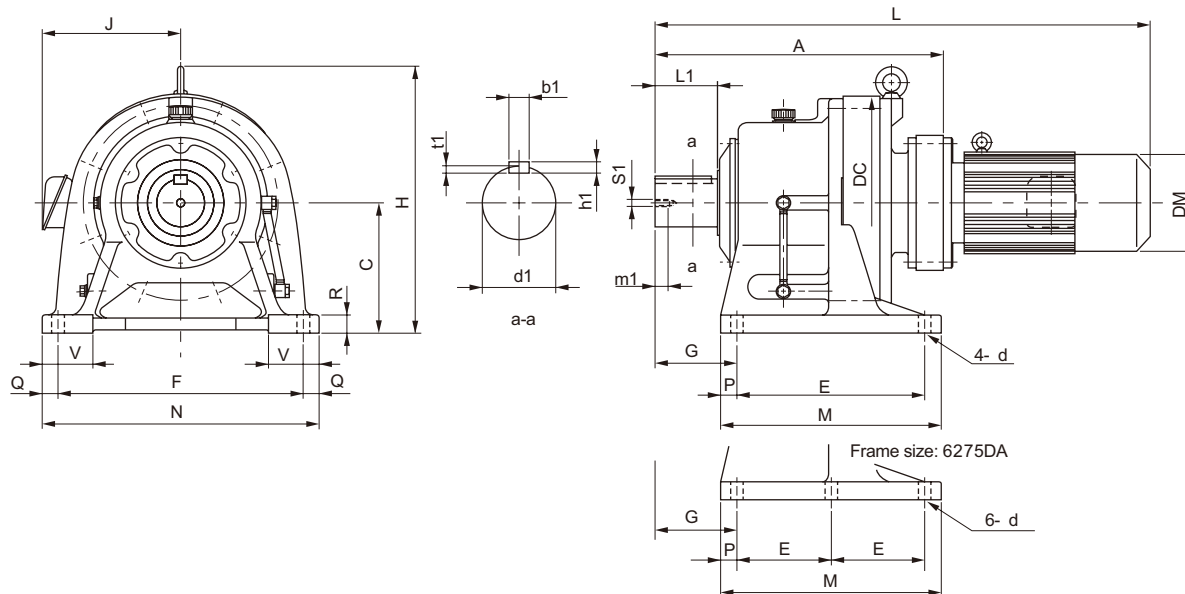
| Model                         | Note: 4 | Motor |     | Standard |     |     |     |        |      |     | With Brake |     |        |  |  |
|-------------------------------|---------|-------|-----|----------|-----|-----|-----|--------|------|-----|------------|-----|--------|--|--|
|                               |         | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L    | H   | J          | DM  | W [kg] |  |  |
| CHHM3 - 6235DA - (B) - Ratio  |         | 2.2   | 4   | 1068     | 667 | 155 | 182 | 561    | 1131 | 667 | 155        | 182 | 567    |  |  |
| CHHM4 - 6235DA - (B) - Ratio  |         | 3.0   | 4   | 1091     | 667 | 166 | 222 | 570    | 1163 | 667 | 166        | 222 | 580    |  |  |
| CHHM5 - 6235DA - (B) - Ratio  |         | 3.7   | 4   | 1091     | 667 | 166 | 222 | 570    | 1163 | 667 | 166        | 222 | 580    |  |  |
| CHHM8 - 6235DA - (B) - Ratio  |         | 5.5   | 4   | 1135     | 667 | 166 | 222 | 577    | 1207 | 667 | 166        | 222 | 587    |  |  |
| CHHM10 - 6235DA - (B) - Ratio |         | 7.5   | 4   | 1163     | 667 | 211 | 251 | 593    | 1258 | 667 | 211        | 251 | 610    |  |  |
| CHHM15 - 6235DA - (B) - Ratio |         | 11    | 4   | 1223     | 667 | 211 | 251 | 607    | 1318 | 667 | 211        | 251 | 624    |  |  |
| CHHM20 - 6235DA - (B) - Ratio |         | 15    | 4   | 1308     | 667 | 261 | 324 | 660    | 1413 | 667 | 261        | 324 | 624    |  |  |
| CHHM25 - 6235DA - (B) - Ratio |         | 18.5  | 4   | 1403     | 667 | 340 | 394 | 737    | 1568 | 667 | 340        | 394 | 788    |  |  |
| CHHM30 - 6235DA - (B) - Ratio |         | 22    | 4   | 1403     | 667 | 340 | 394 | 737    | 1568 | 667 | 340        | 394 | 788    |  |  |
| CHHM15 - 6235DB - (B) - Ratio |         | 11    | 4   | 1245     | 667 | 211 | 251 | 639    | 1340 | 667 | 211        | 251 | 657    |  |  |
| CHHM20 - 6235DB - (B) - Ratio |         | 15    | 4   | 1330     | 667 | 261 | 324 | 701    | 1435 | 667 | 261        | 324 | 735    |  |  |
| CHHM25 - 6235DB - (B) - Ratio |         | 18.5  | 4   | 1425     | 667 | 340 | 394 | 768    | 1590 | 667 | 340        | 394 | 819    |  |  |
| CHHM30 - 6235DB - (B) - Ratio |         | 22    | 4   | 1425     | 667 | 340 | 394 | 768    | 1590 | 667 | 340        | 394 | 819    |  |  |
| CHHM40 - 6235DB - (B) - Ratio |         | 30    | 4   | 1425     | 667 | 340 | 394 | 782    | 1590 | 667 | 340        | 394 | 825    |  |  |
| CHHM50 - 6235DB - (B) - Ratio |         | 37    | 4   | 1540     | 667 | 340 | 394 | 820    | 1755 | 667 | 340        | 394 | 917    |  |  |
| CHHM3 - 6245DA - (B) - Ratio  |         | 2.2   | 4   | 1106     | 729 | 155 | 182 | 670    | 1169 | 729 | 155        | 182 | 676    |  |  |
| CHHM4 - 6245DA - (B) - Ratio  |         | 3.0   | 4   | 1129     | 729 | 166 | 222 | 679    | 1201 | 729 | 166        | 222 | 689    |  |  |
| CHHM5 - 6245DA - (B) - Ratio  |         | 3.7   | 4   | 1129     | 729 | 166 | 222 | 679    | 1201 | 729 | 166        | 222 | 689    |  |  |
| CHHM8 - 6245DA - (B) - Ratio  |         | 5.5   | 4   | 1173     | 729 | 166 | 222 | 686    | 1245 | 729 | 166        | 222 | 696    |  |  |
| CHHM10 - 6245DA - (B) - Ratio |         | 7.5   | 4   | 1201     | 729 | 211 | 251 | 702    | 1296 | 729 | 211        | 251 | 719    |  |  |
| CHHM15 - 6245DA - (B) - Ratio |         | 11    | 4   | 1261     | 729 | 211 | 251 | 716    | 1356 | 729 | 211        | 251 | 733    |  |  |
| CHHM20 - 6245DA - (B) - Ratio |         | 15    | 4   | 1346     | 729 | 261 | 324 | 769    | 1451 | 729 | 261        | 324 | 803    |  |  |
| CHHM25 - 6245DA - (B) - Ratio |         | 18.5  | 4   | 1441     | 729 | 340 | 394 | 840    | 1606 | 729 | 340        | 394 | 891    |  |  |
| CHHM30 - 6245DA - (B) - Ratio |         | 22    | 4   | 1441     | 729 | 340 | 394 | 840    | 1606 | 729 | 340        | 394 | 891    |  |  |
| CHHM15 - 6245DB - (B) - Ratio |         | 11    | 4   | 1282     | 729 | 211 | 251 | 740    | 1377 | 729 | 211        | 251 | 758    |  |  |
| CHHM20 - 6245DB - (B) - Ratio |         | 15    | 4   | 1367     | 729 | 261 | 324 | 800    | 1472 | 729 | 261        | 324 | 834    |  |  |
| CHHM25 - 6245DB - (B) - Ratio |         | 18.5  | 4   | 1462     | 729 | 340 | 394 | 866    | 1627 | 729 | 340        | 394 | 917    |  |  |
| CHHM30 - 6245DB - (B) - Ratio |         | 22    | 4   | 1462     | 729 | 340 | 394 | 866    | 1627 | 729 | 340        | 394 | 917    |  |  |
| CHHM40 - 6245DB - (B) - Ratio |         | 30    | 4   | 1462     | 729 | 340 | 394 | 883    | 1627 | 729 | 340        | 394 | 926    |  |  |
| CHHM50 - 6245DB - (B) - Ratio |         | 37    | 4   | 1577     | 729 | 340 | 394 | 935    | 1792 | 729 | 340        | 394 | 1032   |  |  |

Note: 1. [ ] indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

## Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

CHHM<sup>Note: 1</sup> - 6255DA to 6275DA

| Frame size | A    | C   | DC  | E   | F    | G   | M    | N    | P   | Q  | R  | V   | d  | Output Shaft <span>Note: 2, 3, 5</span> |     |    |    |    |     |    |
|------------|------|-----|-----|-----|------|-----|------|------|-----|----|----|-----|----|-----------------------------------------|-----|----|----|----|-----|----|
|            |      |     |     |     |      |     |      |      |     |    |    |     |    | d1                                      | L1  | b1 | h1 | t1 | S1  | m1 |
| 6255DA     | 956  | 375 | 670 | 520 | 670  | 320 | 630  | 780  | 55  | 55 | 50 | 140 | 39 | 160                                     | 240 | 40 | 22 | 13 | M30 | 49 |
| 6255DB     | 978  | 375 | 670 | 520 | 670  | 320 | 630  | 780  | 55  | 55 | 50 | 140 | 39 | 160                                     | 240 | 40 | 22 | 13 | M30 | 49 |
| 6265DA     | 1088 | 400 | 736 | 590 | 770  | 390 | 700  | 880  | 55  | 55 | 55 | 160 | 45 | 170                                     | 300 | 40 | 22 | 13 | M30 | 49 |
| 6275DA     | 1349 | 540 | 950 | 420 | 1050 | 485 | 1040 | 1160 | 100 | 55 | 60 | 200 | 45 | 180                                     | 330 | 45 | 25 | 15 | M30 | 52 |

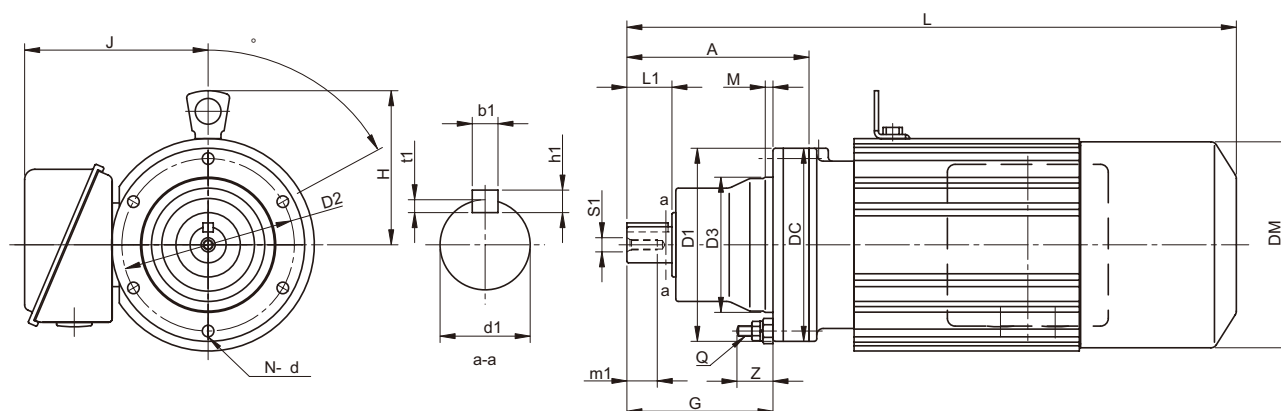
| Model <span>Note: 4</span>    | Motor |     | Standard |      |     |     |        |      |      | With Brake |     |        |      |      |
|-------------------------------|-------|-----|----------|------|-----|-----|--------|------|------|------------|-----|--------|------|------|
|                               | [kW]  | [P] | L        | H    | J   | DM  | W [kg] | L    | H    | J          | DM  | W [kg] | L    | H    |
| CHHM5 - 6255DA - (B) - Ratio  | 3.7   | 4   | 1284     | 815  | 166 | 222 | 1031   | 1356 | 815  | 166        | 222 | 1041   | 1356 | 815  |
| CHHM8 - 6255DA - (B) - Ratio  | 5.5   | 4   | 1328     | 815  | 166 | 222 | 1041   | 1400 | 815  | 166        | 222 | 1051   | 1400 | 815  |
| CHHM10 - 6255DA - (B) - Ratio | 7.5   | 4   | 1346     | 815  | 211 | 251 | 1056   | 1441 | 815  | 213        | 251 | 1071   | 1441 | 815  |
| CHHM15 - 6255DA - (B) - Ratio | 11    | 4   | 1406     | 815  | 211 | 251 | 1071   | 1501 | 815  | 213        | 251 | 1086   | 1501 | 815  |
| CHHM20 - 6255DA - (B) - Ratio | 15    | 4   | 1486     | 815  | 261 | 324 | 1121   | 1591 | 815  | 261        | 324 | 1157   | 1591 | 815  |
| CHHM25 - 6255DA - (B) - Ratio | 18.5  | 4   | 1581     | 815  | 340 | 394 | 1195   | 1746 | 815  | 340        | 394 | 1246   | 1746 | 815  |
| CHHM30 - 6255DA - (B) - Ratio | 22    | 4   | 1581     | 815  | 340 | 394 | 1195   | 1746 | 815  | 340        | 394 | 1246   | 1746 | 815  |
| CHHM40 - 6255DA - (B) - Ratio | 30    | 4   | 1581     | 815  | 340 | 394 | 1215   | 1746 | 815  | 340        | 394 | 1258   | 1746 | 815  |
| CHHM15 - 6255DB - (B) - Ratio | 11    | 4   | 1443     | 815  | 211 | 251 | 1144   | 1538 | 815  | 211        | 251 | 1159   | 1538 | 815  |
| CHHM20 - 6255DB - (B) - Ratio | 15    | 4   | 1508     | 815  | 261 | 324 | 1194   | 1613 | 815  | 261        | 324 | 1228   | 1613 | 815  |
| CHHM25 - 6255DB - (B) - Ratio | 18.5  | 4   | 1603     | 815  | 340 | 394 | 1270   | 1768 | 815  | 340        | 394 | 1321   | 1768 | 815  |
| CHHM30 - 6255DB - (B) - Ratio | 22    | 4   | 1603     | 815  | 340 | 394 | 1270   | 1768 | 815  | 340        | 394 | 1321   | 1768 | 815  |
| CHHM40 - 6255DB - (B) - Ratio | 30    | 4   | 1603     | 815  | 340 | 394 | 1285   | 1768 | 815  | 340        | 394 | 1328   | 1768 | 815  |
| CHHM50 - 6255DB - (B) - Ratio | 37    | 4   | 1718     | 815  | 340 | 394 | 1323   | 1928 | 815  | 340        | 394 | 1420   | 1928 | 815  |
| CHHM60 - 6255DB - (B) - Ratio | 45    | 4   | 1718     | 815  | 340 | 394 | 1323   | 1928 | 815  | 340        | 394 | 1420   | 1928 | 815  |
| CHHM8 - 6265DA - (B) - Ratio  | 5.5   | 4   | 1480     | 874  | 166 | 222 | 1366   | 1552 | 874  | 166        | 222 | 1376   | 1552 | 874  |
| CHHM10 - 6265DA - (B) - Ratio | 7.5   | 4   | 1493     | 874  | 211 | 251 | 1381   | 1588 | 874  | 211        | 251 | 1401   | 1588 | 874  |
| CHHM15 - 6265DA - (B) - Ratio | 11    | 4   | 1553     | 874  | 211 | 251 | 1396   | 1648 | 874  | 211        | 251 | 1411   | 1648 | 874  |
| CHHM20 - 6265DA - (B) - Ratio | 15    | 4   | 1618     | 874  | 261 | 324 | 1446   | 1723 | 874  | 261        | 324 | 1482   | 1723 | 874  |
| CHHM25 - 6265DA - (B) - Ratio | 18.5  | 4   | 1713     | 874  | 340 | 394 | 1525   | 1878 | 874  | 340        | 394 | 1570   | 1878 | 874  |
| CHHM30 - 6265DA - (B) - Ratio | 22    | 4   | 1713     | 874  | 340 | 394 | 1525   | 1878 | 874  | 340        | 394 | 1570   | 1878 | 874  |
| CHHM40 - 6265DA - (B) - Ratio | 30    | 4   | 1713     | 874  | 340 | 394 | 1540   | 1878 | 874  | 340        | 394 | 1583   | 1878 | 874  |
| CHHM50 - 6265DA - (B) - Ratio | 37    | 4   | 1828     | 874  | 340 | 394 | 1575   | 2043 | 874  | 340        | 394 | 1672   | 2043 | 874  |
| CHHM60 - 6265DA - (B) - Ratio | 45    | 4   | 1828     | 874  | 340 | 394 | 1575   | 2043 | 874  | 340        | 394 | 1672   | 2043 | 874  |
| CHHM10 - 6275DA - (B) - Ratio | 7.5   | 4   | 1754     | 1161 | 211 | 251 | 2516   | 1849 | 1161 | 211        | 251 | 2536   | 1849 | 1161 |
| CHHM15 - 6275DA - (B) - Ratio | 11    | 4   | 1814     | 1161 | 211 | 251 | 2531   | 1909 | 1161 | 211        | 251 | 2546   | 1909 | 1161 |
| CHHM20 - 6275DA - (B) - Ratio | 15    | 4   | 1879     | 1161 | 261 | 324 | 2581   | 1984 | 1161 | 261        | 324 | 2617   | 1984 | 1161 |
| CHHM25 - 6275DA - (B) - Ratio | 18.5  | 4   | 1974     | 1161 | 340 | 394 | 2660   | 2139 | 1161 | 340        | 394 | 2705   | 2139 | 1161 |
| CHHM30 - 6275DA - (B) - Ratio | 22    | 4   | 1974     | 1161 | 340 | 394 | 2660   | 2139 | 1161 | 340        | 394 | 2705   | 2139 | 1161 |
| CHHM40 - 6275DA - (B) - Ratio | 30    | 4   | 1974     | 1161 | 340 | 394 | 2670   | 2139 | 1161 | 340        | 394 | 2718   | 2139 | 1161 |
| CHHM50 - 6275DA - (B) - Ratio | 37    | 4   | 2089     | 1161 | 340 | 394 | 2715   | 2304 | 1161 | 340        | 394 | 2810   | 2304 | 1161 |
| CHHM60 - 6275DA - (B) - Ratio | 45    | 4   | 2089     | 1161 | 340 | 394 | 2715   | 2304 | 1161 | 340        | 394 | 2810   | 2304 | 1161 |

Note: 4. "B" after the frame size indicates models equipped with brake.

5. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

6. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Universal Direction, Flange Mount)

CNFM<sup>Note: 1</sup> - 606□ to 609□

| Frame size<br><small>Note: 5</small> | A   | G   | D1  | D2  | D3  | DC  | Q  | Z  | M | N | d   | α°   | Output Shaft<br><small>Note: 2, 3, 7</small> |    |    |    |     |    |    |
|--------------------------------------|-----|-----|-----|-----|-----|-----|----|----|---|---|-----|------|----------------------------------------------|----|----|----|-----|----|----|
|                                      |     |     |     |     |     |     |    |    |   |   |     |      | d1                                           | L1 | b1 | h1 | t1  | S1 | m1 |
| 606□                                 | 92  | 68  | 110 | 98  | 80  | 110 | M6 | 21 | 4 | 6 | 6.6 | 60   | 14                                           | 25 | 5  | 5  | 3   | M5 | 16 |
| 607□                                 | 98  | 74  | 110 | 98  | 80  | 110 | M6 | 21 | 4 | 6 | 6.6 | 60   | 18                                           | 30 | 6  | 6  | 3.5 | M6 | 16 |
| 608□                                 | 129 | 91  | 134 | 118 | 95  | 134 | M8 | 27 | 5 | 8 | 9   | 22.5 | 22                                           | 35 | 6  | 6  | 3.5 | M6 | 16 |
| 609□                                 | 142 | 114 | 150 | 134 | 105 | 150 | M8 | 28 | 6 | 8 | 9   | 22.5 | 28                                           | 35 | 8  | 7  | 4   | M8 | 20 |

| Model<br>Note: 5, 6 |   |      |         |       | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|---------------------|---|------|---------|-------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                     |   |      |         |       | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CNFM01              | - | 606□ | - (B) - | Ratio | 0.1   | 4   | 254      | -   | 113 | 119 | 6.5    | 261        | -   | 113 | 124 | 8      |
| CNFM02              | - | 606□ | - (B) - | Ratio | 0.2   | 4   | 272      | -   | 113 | 124 | 7.5    | 300        | -   | 113 | 124 | 9      |
| CNFM03              | - | 606□ | - (B) - | Ratio | 0.25  | 4   | 272      | -   | 113 | 124 | 7.5    | 300        | -   | 113 | 124 | 9      |
| CNFM01              | - | 607□ | - (B) - | Ratio | 0.1   | 4   | 260      | -   | 113 | 119 | 7.5    | 267        | -   | 113 | 124 | 8.5    |
| CNFM02              | - | 607□ | - (B) - | Ratio | 0.2   | 4   | 278      | -   | 113 | 124 | 8.5    | 306        | -   | 113 | 124 | 9.5    |
| CNFM03              | - | 607□ | - (B) - | Ratio | 0.25  | 4   | 278      | -   | 113 | 124 | 8.5    | 306        | -   | 113 | 124 | 9.5    |
| CNFM05              | - | 607□ | - (B) - | Ratio | 0.4   | 4   | 294      | -   | 113 | 124 | 9.5    | 326        | -   | 113 | 124 | 10.5   |
| CNFM01              | - | 608□ | - (B) - | Ratio | 0.1   | 4   | 286      | -   | 113 | 119 | 10     | 293        | -   | 113 | 124 | 11     |
| CNFM02              | - | 608□ | - (B) - | Ratio | 0.2   | 4   | 304      | -   | 113 | 124 | 11     | 332        | -   | 113 | 124 | 12     |
| CNFM03              | - | 608□ | - (B) - | Ratio | 0.25  | 4   | 304      | -   | 113 | 124 | 11     | 332        | -   | 113 | 124 | 12     |
| CNFM05              | - | 608□ | - (B) - | Ratio | 0.4   | 4   | 320      | -   | 113 | 124 | 13     | 352        | -   | 113 | 124 | 14     |
| CNFM08              | - | 608□ | - (B) - | Ratio | 0.55  | 4   | 361      | 113 | 143 | 160 | 17     | 404        | 113 | 143 | 160 | 18     |
| CNFM1               | - | 608□ | - (B) - | Ratio | 0.75  | 4   | 361      | 113 | 143 | 160 | 17     | 404        | 113 | 143 | 160 | 18     |
| CNFM01              | - | 609□ | - (B) - | Ratio | 0.1   | 4   | 304      | -   | 113 | 119 | 11     | 311        | -   | 113 | 124 | 13     |
| CNFM02              | - | 609□ | - (B) - | Ratio | 0.2   | 4   | 322      | -   | 113 | 124 | 12     | 350        | -   | 113 | 124 | 14     |
| CNFM03              | - | 609□ | - (B) - | Ratio | 0.25  | 4   | 322      | -   | 113 | 124 | 12     | 350        | -   | 113 | 124 | 14     |
| CNFM05              | - | 609□ | - (B) - | Ratio | 0.4   | 4   | 338      | -   | 113 | 124 | 13     | 370        | -   | 113 | 124 | 15     |
| CNFM08              | - | 609□ | - (B) - | Ratio | 0.55  | 4   | 379      | 113 | 143 | 160 | 17     | 422        | 113 | 143 | 160 | 19     |
| CNFM1               | - | 609□ | - (B) - | Ratio | 0.75  | 4   | 379      | 113 | 143 | 160 | 17     | 422        | 113 | 143 | 160 | 19     |
| CNFM1H              | - | 609□ | - (B) - | Ratio | 1.1   | 4   | 412      | 120 | 148 | 169 | 21     | 474        | 120 | 148 | 169 | 25     |
| CNFM2               | - | 609□ | - (B) - | Ratio | 1.5   | 4   | 412      | 120 | 148 | 169 | 21     | 474        | 120 | 148 | 169 | 25     |

Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

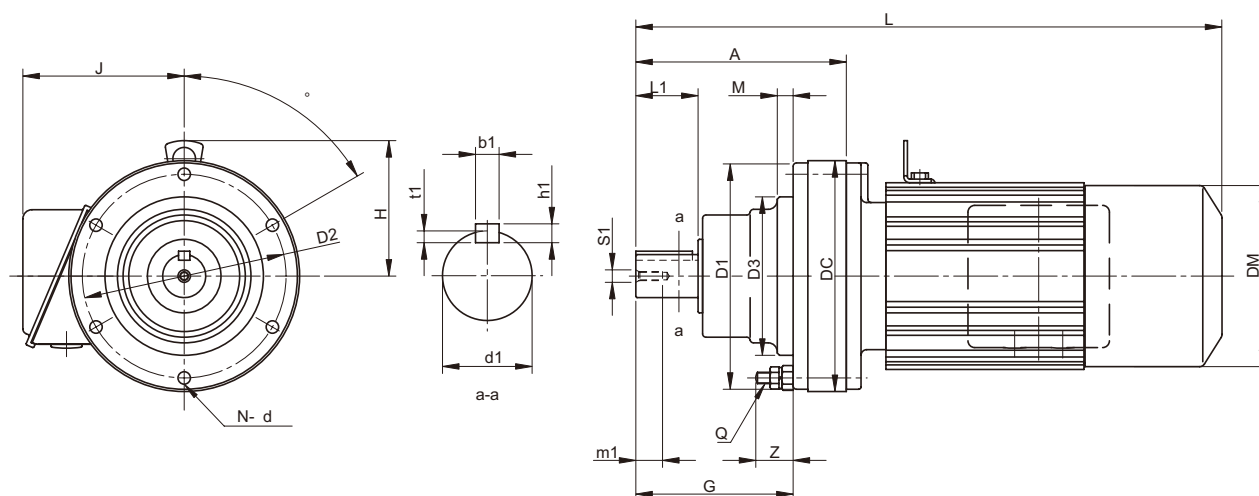
3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "g6."



# Dimension Tables Gearmotors (Universal Direction, Flange Mount)

CNFM<sup>Note: 1</sup> - 610□ to 612□



| Frame size<br><div>Note: 5</div> |     |     |     |     |     |     |     |    |    |   |    |      | Output Shaft <div>Note: 2, 3, 7</div> |    |    |    |    |    |    |
|----------------------------------|-----|-----|-----|-----|-----|-----|-----|----|----|---|----|------|---------------------------------------|----|----|----|----|----|----|
|                                  | A   | G   | D1  | D2  | D3  | DC  | Q   | Z  | M  | N | d  | α°   | d1                                    | L1 | b1 | h1 | t1 | S1 | m1 |
|                                  |     |     |     |     |     |     |     |    |    |   |    |      |                                       |    |    |    |    |    |    |
| 610□                             | 156 | 114 | 150 | 134 | 105 | 150 | M8  | 28 | 6  | 8 | 9  | 22.5 | 28                                    | 35 | 8  | 7  | 4  | M8 | 20 |
| 611□                             | 170 | 118 | 162 | 146 | 115 | 162 | M8  | 28 | 6  | 8 | 9  | 22.5 | 32                                    | 45 | 10 | 8  | 5  | M8 | 20 |
| 612□                             | 186 | 139 | 200 | 180 | 140 | 204 | M10 | 33 | 14 | 6 | 11 | 60   | 38                                    | 55 | 10 | 8  | 5  | M8 | 20 |

| Model<br><small>Note: 5, 6</small> | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                                    | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CNFM02 - 610□ - (B) - Ratio        | 0.2   | 4   | 336      | -   | 113 | 124 | 14     | 364        | -   | 113 | 124 | 16     |
| CNFM03 - 610□ - (B) - Ratio        | 0.25  | 4   | 336      | -   | 113 | 124 | 14     | 364        | -   | 113 | 124 | 16     |
| CNFM05 - 610□ - (B) - Ratio        | 0.4   | 4   | 352      | -   | 113 | 124 | 15     | 384        | -   | 113 | 124 | 17     |
| CNFM08 - 610□ - (B) - Ratio        | 0.55  | 4   | 393      | 113 | 143 | 160 | 19     | 436        | 113 | 143 | 160 | 22     |
| CNFM1 - 610□ - (B) - Ratio         | 0.75  | 4   | 393      | 113 | 143 | 160 | 19     | 436        | 113 | 143 | 160 | 22     |
| CNFM1H - 610□ - (B) - Ratio        | 1.1   | 4   | 426      | 120 | 148 | 169 | 23     | 488        | 120 | 148 | 169 | 28     |
| CNFM2 - 610□ - (B) - Ratio         | 1.5   | 4   | 426      | 120 | 148 | 169 | 23     | 488        | 120 | 148 | 169 | 28     |
| CNFM3 - 610□ - (B) - Ratio         | 2.2   | 4   | 446      | 126 | 155 | 182 | 27     | 509        | 126 | 155 | 182 | 33     |
| CNFM05 - 611□ - (B) - Ratio        | 0.4   | 4   | 363      | -   | 113 | 124 | 17     | 394        | -   | 113 | 124 | 18     |
| CNFM08 - 611□ - (B) - Ratio        | 0.55  | 4   | 403      | 113 | 143 | 160 | 20     | 452        | 113 | 143 | 160 | 23     |
| CNFM1 - 611□ - (B) - Ratio         | 0.75  | 4   | 403      | 113 | 143 | 160 | 20     | 452        | 113 | 143 | 160 | 23     |
| CNFM1H - 611□ - (B) - Ratio        | 1.1   | 4   | 436      | 120 | 148 | 169 | 23     | 493        | 120 | 148 | 169 | 28     |
| CNFM2 - 611□ - (B) - Ratio         | 1.5   | 4   | 436      | 120 | 148 | 169 | 23     | 493        | 120 | 148 | 169 | 28     |
| CNFM3 - 611□ - (B) - Ratio         | 2.2   | 4   | 456      | 126 | 155 | 182 | 27     | 519        | 126 | 155 | 182 | 33     |
| CNFM4 - 611□ - (B) - Ratio         | 3.0   | 4   | 491      | 146 | 166 | 222 | 37     | 563        | 146 | 166 | 222 | 47     |
| CNFM5 - 611□ - (B) - Ratio         | 3.7   | 4   | 491      | 146 | 166 | 222 | 37     | 563        | 146 | 166 | 222 | 47     |
| CNFM05 - 612□ - (B) - Ratio        | 0.4   | 4   | 387      | 113 | 113 | 124 | 26     | 419        | 113 | 113 | 124 | 28     |
| CNFM08 - 612□ - (B) - Ratio        | 0.55  | 4   | 423      | 113 | 143 | 160 | 28     | 466        | 113 | 143 | 160 | 31     |
| CNFM1 - 612□ - (B) - Ratio         | 0.75  | 4   | 423      | 113 | 143 | 160 | 28     | 466        | 113 | 143 | 160 | 31     |
| CNFM1H - 612□ - (B) - Ratio        | 1.1   | 4   | 456      | 120 | 148 | 169 | 32     | 518        | 120 | 148 | 169 | 37     |
| CNFM2 - 612□ - (B) - Ratio         | 1.5   | 4   | 456      | 120 | 148 | 169 | 32     | 518        | 120 | 148 | 169 | 37     |
| CNFM3 - 612□ - (B) - Ratio         | 2.2   | 4   | 476      | 126 | 155 | 182 | 36     | 539        | 126 | 155 | 182 | 43     |
| CNFM4 - 612□ - (B) - Ratio         | 3.0   | 4   | 499      | 146 | 166 | 222 | 46     | 571        | 146 | 166 | 222 | 56     |
| CNFM5 - 612□ - (B) - Ratio         | 3.7   | 4   | 499      | 146 | 166 | 222 | 46     | 571        | 146 | 166 | 222 | 56     |
| CNFM8 - 612□ - (B) - Ratio         | 5.5   | 4   | 543      | 146 | 166 | 222 | 53     | 615        | 146 | 166 | 222 | 63     |

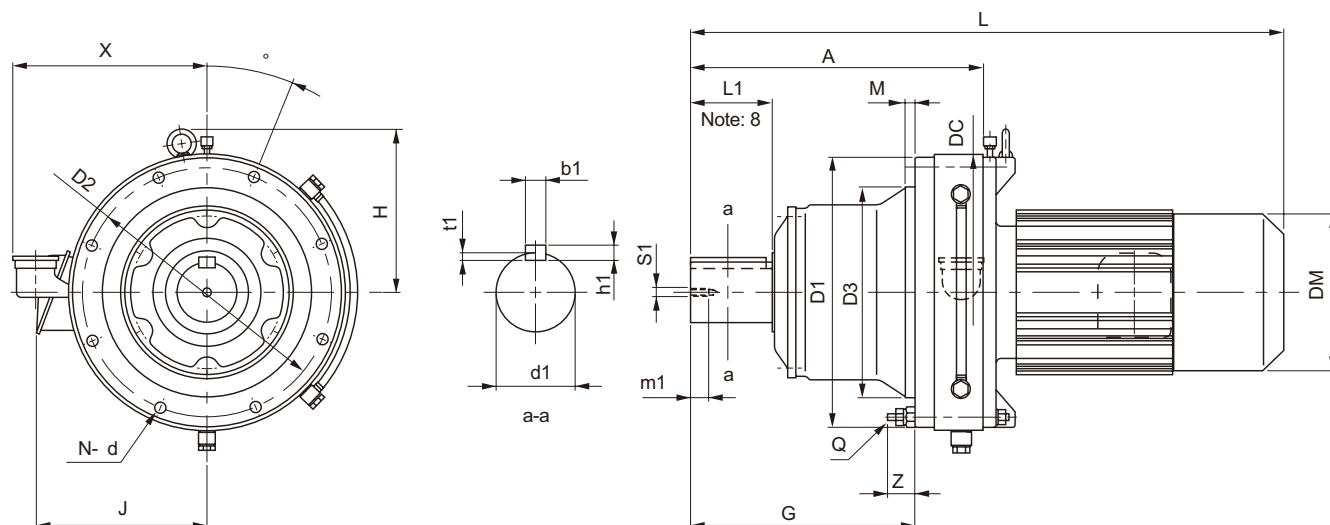
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 613□ to 614□

| Frame size<br>Note: 5 | A   | G   | D1  | D2  | D3  | DC  | Q   | Z  | M  | N | d  | $\alpha^\circ$ | X   | Output Shaft<br>Note: 2, 3, 7 |    |    |    |     |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|----|----|---|----|----------------|-----|-------------------------------|----|----|----|-----|-----|----|
|                       |     |     |     |     |     |     |     |    |    |   |    |                |     | d1                            | L1 | b1 | h1 | t1  | S1  | m1 |
| 613□                  | 240 | 178 | 226 | 205 | 165 | 230 | M10 | 31 | 16 | 6 | 11 | 60             | 208 | 50                            | 70 | 14 | 9  | 5.5 | M10 | 18 |
| 614□                  | 260 | 198 | 226 | 205 | 165 | 230 | M10 | 31 | 16 | 6 | 11 | 60             | 208 | 50                            | 90 | 14 | 9  | 5.5 | M10 | 18 |

| Model<br>Note: 5, 6         | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|-----------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                             | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHFM08 - 613□ - (B) - Ratio | 0.55  | 4   | 477      | 111 | 143 | 160 | 44     | 520        | 111 | 143 | 160 | 46     |
| CHFM1 - 613□ - (B) - Ratio  | 0.75  | 4   | 477      | 111 | 143 | 160 | 44     | 520        | 111 | 143 | 160 | 47     |
| CHFM1H - 613□ - (B) - Ratio | 1.1   | 4   | 510      | 118 | 148 | 169 | 48     | 572        | 118 | 148 | 169 | 53     |
| CHFM2 - 613□ - (B) - Ratio  | 1.5   | 4   | 510      | 118 | 148 | 169 | 48     | 572        | 118 | 148 | 169 | 53     |
| CHFM3 - 613□ - (B) - Ratio  | 2.2   | 4   | 530      | 124 | 155 | 182 | 51     | 593        | 124 | 155 | 182 | 58     |
| CHFM4 - 613□ - (B) - Ratio  | 3.0   | 4   | 553      | 146 | 166 | 222 | 61     | 625        | 146 | 166 | 222 | 71     |
| CHFM5 - 613□ - (B) - Ratio  | 3.7   | 4   | 553      | 146 | 166 | 222 | 61     | 625        | 146 | 166 | 222 | 71     |
| CHFM8 - 613□ - (B) - Ratio  | 5.5   | 4   | 597      | 146 | 166 | 222 | 68     | 669        | 146 | 166 | 222 | 78     |
| CHFM10 - 613□ - (B) - Ratio | 7.5   | 4   | 620      | 173 | 211 | 251 | 83     | 715        | 173 | 211 | 251 | 101    |
| CHFM15 - 613□ - (B) - Ratio | 11    | 4   | 680      | 173 | 211 | 251 | 97     | 775        | 173 | 211 | 251 | 115    |
| CHFM1 - 614□ - (B) - Ratio  | 0.75  | 4   | 497      | 118 | 143 | 160 | 45     | 540        | 118 | 143 | 160 | 48     |
| CHFM1H - 614□ - (B) - Ratio | 1.1   | 4   | 530      | 118 | 148 | 169 | 49     | 592        | 118 | 148 | 169 | 54     |
| CHFM2 - 614□ - (B) - Ratio  | 1.5   | 4   | 530      | 118 | 148 | 169 | 49     | 592        | 118 | 148 | 169 | 54     |
| CHFM3 - 614□ - (B) - Ratio  | 2.2   | 4   | 550      | 124 | 155 | 182 | 52     | 613        | 124 | 155 | 182 | 59     |
| CHFM4 - 614□ - (B) - Ratio  | 3.0   | 4   | 573      | 146 | 166 | 222 | 62     | 645        | 146 | 166 | 222 | 72     |
| CHFM5 - 614□ - (B) - Ratio  | 3.7   | 4   | 573      | 146 | 166 | 222 | 62     | 645        | 146 | 166 | 222 | 72     |
| CHFM8 - 614□ - (B) - Ratio  | 5.5   | 4   | 617      | 146 | 166 | 222 | 69     | 689        | 146 | 166 | 222 | 79     |
| CHFM10 - 614□ - (B) - Ratio | 7.5   | 4   | 640      | 173 | 211 | 251 | 84     | 735        | 173 | 211 | 251 | 102    |
| CHFM15 - 614□ - (B) - Ratio | 11    | 4   | 700      | 173 | 211 | 251 | 98     | 795        | 173 | 211 | 251 | 116    |
| CHFM20 - 614□ - (B) - Ratio | 15    | 4   | 790      | 208 | 261 | 324 | 150    | 895        | 208 | 261 | 324 | 184    |

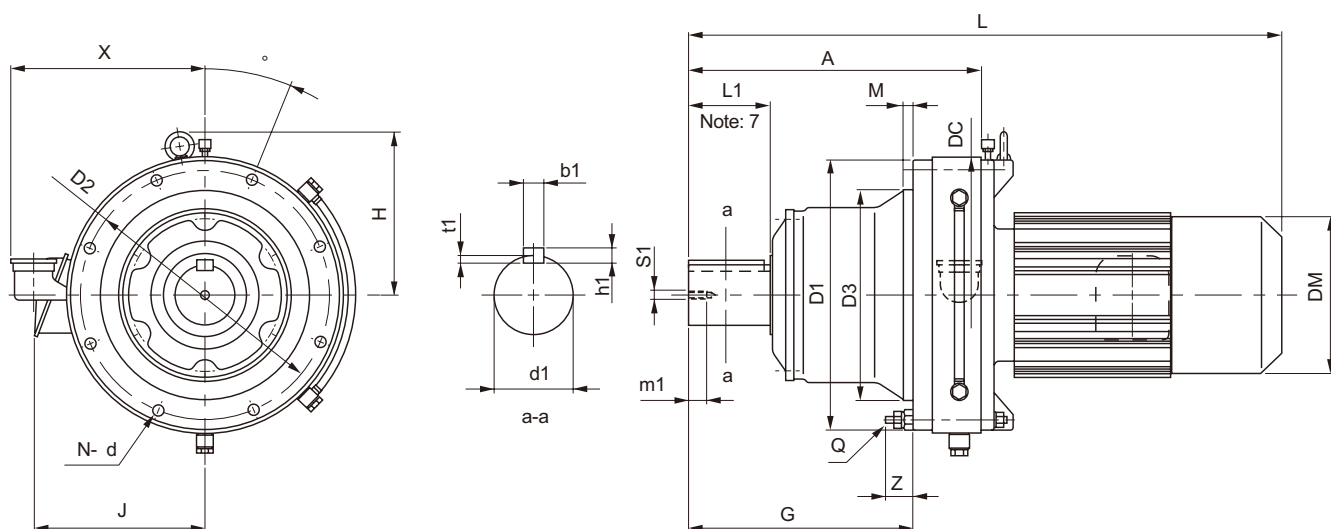
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "g6."

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 616□ to 617□

GEARMOTORS

Dimension Tables  
CHFM

| Frame size<br><small>Note: 5</small> | A   | G   | D1  | D2  | D3  | DC  | Q   | Z  | M  | N | d  | α°   | X   | Output Shaft <small>Note: 2, 3, 7</small> |    |    |    |     |     |    |
|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|----|----|---|----|------|-----|-------------------------------------------|----|----|----|-----|-----|----|
|                                      |     |     |     |     |     |     |     |    |    |   |    |      |     | d1                                        | L1 | b1 | h1 | t1  | S1  | m1 |
| 616□                                 | 308 | 222 | 296 | 270 | 200 | 300 | M12 | 35 | 10 | 6 | 14 | 30   | 228 | 60                                        | 90 | 18 | 11 | 7   | M10 | 18 |
| 617□                                 | 352 | 262 | 330 | 300 | 250 | 340 | M12 | 41 | 12 | 8 | 14 | 22.5 | 243 | 70                                        | 90 | 20 | 12 | 7.5 | M12 | 24 |

| Model<br><small>Note: 5, 6</small> | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                                    | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHFM1H - 616□ - (B) - Ratio        | 1.1   | 4   | 583      | 118 | 148 | 169 | 76     | 645        | 118 | 148 | 169 | 81     |
| CHFM2 - 616□ - (B) - Ratio         | 1.5   | 4   | 583      | 118 | 148 | 169 | 76     | 645        | 118 | 148 | 169 | 81     |
| CHFM3 - 616□ - (B) - Ratio         | 2.2   | 4   | 598      | 124 | 155 | 182 | 79     | 661        | 124 | 155 | 182 | 85     |
| CHFM4 - 616□ - (B) - Ratio         | 3.0   | 4   | 621      | 146 | 166 | 222 | 88     | 693        | 146 | 166 | 222 | 98     |
| CHFM5 - 616□ - (B) - Ratio         | 3.7   | 4   | 621      | 146 | 166 | 222 | 88     | 693        | 146 | 166 | 222 | 98     |
| CHFM8 - 616□ - (B) - Ratio         | 5.5   | 4   | 665      | 146 | 166 | 222 | 95     | 737        | 146 | 166 | 222 | 105    |
| CHFM10 - 616□ - (B) - Ratio        | 7.5   | 4   | 693      | 173 | 211 | 251 | 111    | 788        | 173 | 211 | 251 | 128    |
| CHFM15 - 616□ - (B) - Ratio        | 11    | 4   | 753      | 173 | 211 | 251 | 125    | 848        | 173 | 211 | 251 | 142    |
| CHFM20 - 616□ - (B) - Ratio        | 15    | 4   | 838      | 208 | 261 | 324 | 178    | 943        | 208 | 261 | 324 | 212    |
| CHFM25 - 616□ - (B) - Ratio        | 18.5  | 4   | 933      | 208 | 340 | 394 | 254    | 1098       | 208 | 340 | 394 | 305    |
| CHFM30 - 616□ - (B) - Ratio        | 22    | 4   | 933      | 208 | 340 | 394 | 254    | 1098       | 208 | 340 | 394 | 305    |
| CHFM4 - 617□ - (B) - Ratio         | 3.0   | 4   | 680      | 203 | 166 | 222 | 119    | 752        | 203 | 166 | 222 | 129    |
| CHFM5 - 617□ - (B) - Ratio         | 3.7   | 4   | 680      | 203 | 166 | 222 | 119    | 752        | 203 | 166 | 222 | 129    |
| CHFM8 - 617□ - (B) - Ratio         | 5.5   | 4   | 724      | 203 | 166 | 222 | 126    | 796        | 203 | 166 | 222 | 136    |
| CHFM10 - 617□ - (B) - Ratio        | 7.5   | 4   | 742      | 203 | 211 | 251 | 141    | 837        | 203 | 211 | 251 | 159    |
| CHFM15 - 617□ - (B) - Ratio        | 11    | 4   | 802      | 203 | 211 | 251 | 155    | 897        | 203 | 211 | 251 | 173    |
| CHFM20 - 617□ - (B) - Ratio        | 15    | 4   | 882      | 213 | 261 | 324 | 209    | 987        | 213 | 261 | 324 | 243    |
| CHFM25 - 617□ - (B) - Ratio        | 18.5  | 4   | 977      | 227 | 340 | 394 | 281    | 1142       | 227 | 340 | 394 | 332    |
| CHFM30 - 617□ - (B) - Ratio        | 22    | 4   | 977      | 227 | 340 | 394 | 281    | 1142       | 227 | 340 | 394 | 332    |
| CHFM40 - 617□ - (B) - Ratio        | 30    | 4   | 977      | 228 | 340 | 394 | 298    | 1142       | 228 | 340 | 394 | 341    |

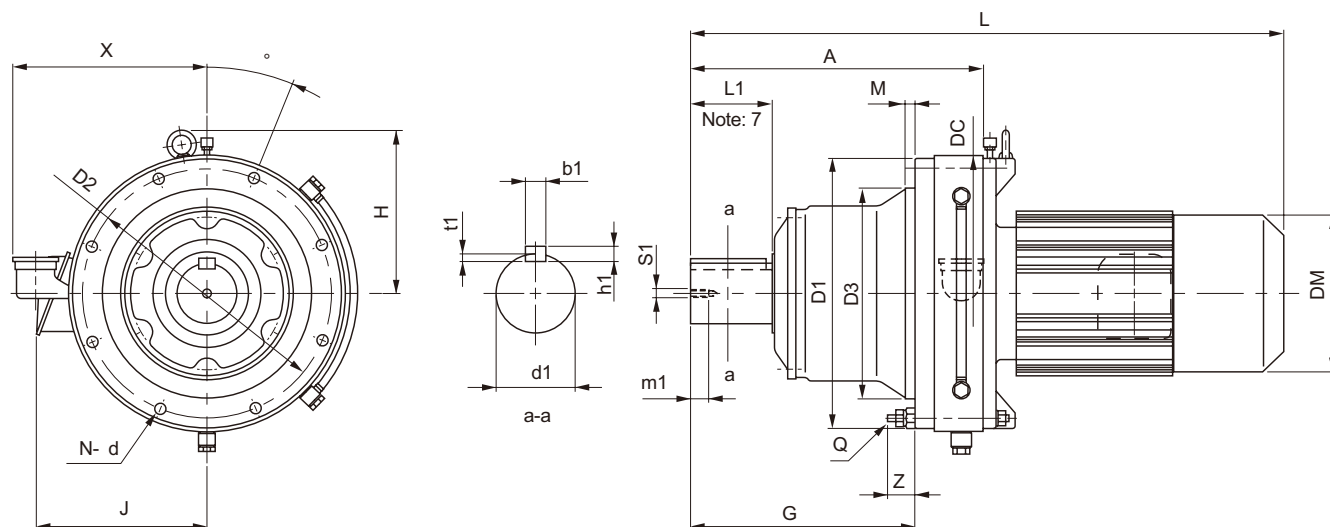
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 618□ to 619□

| Frame size<br>Note: 5 | A   | G   | D1  | D2  | D3  | DC  | Q   | Z  | M  | N  | d  | $\alpha^\circ$ | X   | Output Shaft<br>Note: 2, 3, 7 |     |    |    |    |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----------------|-----|-------------------------------|-----|----|----|----|-----|----|
|                       |     |     |     |     |     |     |     |    |    |    |    |                |     | d1                            | L1  | b1 | h1 | t1 | S1  | m1 |
| 618□                  | 389 | 299 | 360 | 330 | 280 | 370 | M12 | 38 | 12 | 8  | 14 | 22.5           | 258 | 80                            | 110 | 22 | 14 | 9  | M12 | 24 |
| 619□                  | 465 | 365 | 420 | 380 | 320 | 430 | M12 | 41 | 10 | 12 | 14 | 15             | 285 | 95                            | 135 | 25 | 14 | 9  | M20 | 34 |

| Model<br>Note: 5, 6 |   |      |       |         | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|---------------------|---|------|-------|---------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                     |   |      |       |         | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHFM4               | - | 618□ | - (B) | - Ratio | 3.0   | 4   | 717      | 218 | 166 | 222 | 149    | 789        | 218 | 166 | 222 | 159    |
| CHFM5               | - | 618□ | - (B) | - Ratio | 3.7   | 4   | 717      | 218 | 166 | 222 | 149    | 789        | 218 | 166 | 222 | 159    |
| CHFM8               | - | 618□ | - (B) | - Ratio | 5.5   | 4   | 761      | 218 | 166 | 222 | 157    | 833        | 218 | 166 | 222 | 167    |
| CHFM10              | - | 618□ | - (B) | - Ratio | 7.5   | 4   | 779      | 218 | 211 | 251 | 172    | 874        | 218 | 211 | 251 | 190    |
| CHFM15              | - | 618□ | - (B) | - Ratio | 11    | 4   | 839      | 218 | 211 | 251 | 186    | 934        | 218 | 211 | 251 | 204    |
| CHFM20              | - | 618□ | - (B) | - Ratio | 15    | 4   | 919      | 217 | 261 | 324 | 246    | 1024       | 217 | 261 | 324 | 275    |
| CHFM25              | - | 618□ | - (B) | - Ratio | 18.5  | 4   | 1014     | 227 | 340 | 394 | 312    | 1179       | 227 | 340 | 394 | 363    |
| CHFM30              | - | 618□ | - (B) | - Ratio | 22    | 4   | 1014     | 227 | 340 | 394 | 312    | 1179       | 227 | 340 | 394 | 363    |
| CHFM40              | - | 618□ | - (B) | - Ratio | 30    | 4   | 1014     | 228 | 340 | 394 | 329    | 1179       | 228 | 340 | 394 | 372    |
| CHFM50              | - | 618□ | - (B) | - Ratio | 37    | 4   | 1129     | 228 | 340 | 394 | 377    | 1344       | 228 | 340 | 394 | 474    |
| CHFM60              | - | 618□ | - (B) | - Ratio | 45    | 4   | 1129     | 228 | 340 | 394 | 377    | 1344       | 228 | 340 | 394 | 474    |
| CHFM8               | - | 619□ | - (B) | - Ratio | 5.5   | 4   | 857      | 261 | 166 | 222 | 217    | 929        | 261 | 166 | 222 | 227    |
| CHFM10              | - | 619□ | - (B) | - Ratio | 7.5   | 4   | 870      | 261 | 211 | 251 | 230    | 965        | 261 | 211 | 251 | 248    |
| CHFM15              | - | 619□ | - (B) | - Ratio | 11    | 4   | 930      | 261 | 211 | 251 | 244    | 1025       | 261 | 211 | 251 | 262    |
| CHFM20              | - | 619□ | - (B) | - Ratio | 15    | 4   | 995      | 217 | 261 | 324 | 297    | 1100       | 217 | 261 | 324 | 332    |
| CHFM25              | - | 619□ | - (B) | - Ratio | 18.5  | 4   | 1090     | 227 | 340 | 394 | 373    | 1255       | 227 | 340 | 394 | 418    |
| CHFM256             | - | 619□ | - (B) | - Ratio | 18.5  | 6   | 1090     | 227 | 340 | 394 | 388    | 1255       | 227 | 340 | 394 | 431    |
| CHFM30              | - | 619□ | - (B) | - Ratio | 22    | 4   | 1090     | 227 | 340 | 394 | 373    | 1255       | 227 | 340 | 394 | 418    |
| CHFM40              | - | 619□ | - (B) | - Ratio | 30    | 4   | 1090     | 261 | 340 | 394 | 388    | 1255       | 261 | 340 | 394 | 431    |
| CHFM406             | - | 619□ | - (B) | - Ratio | 30    | 6   | 1205     | 261 | 340 | 394 | 426    | 1420       | 261 | 340 | 394 | 523    |
| CHFM50              | - | 619□ | - (B) | - Ratio | 37    | 4   | 1205     | 261 | 340 | 394 | 426    | 1420       | 261 | 340 | 394 | 523    |
| CHFM506             | - | 619□ | - (B) | - Ratio | 37    | 6   | 1205     | 261 | 340 | 394 | 426    | 1420       | 261 | 340 | 394 | 523    |
| CHFM60              | - | 619□ | - (B) | - Ratio | 45    | 4   | 1205     | 261 | 340 | 394 | 426    | 1420       | 261 | 340 | 394 | 523    |

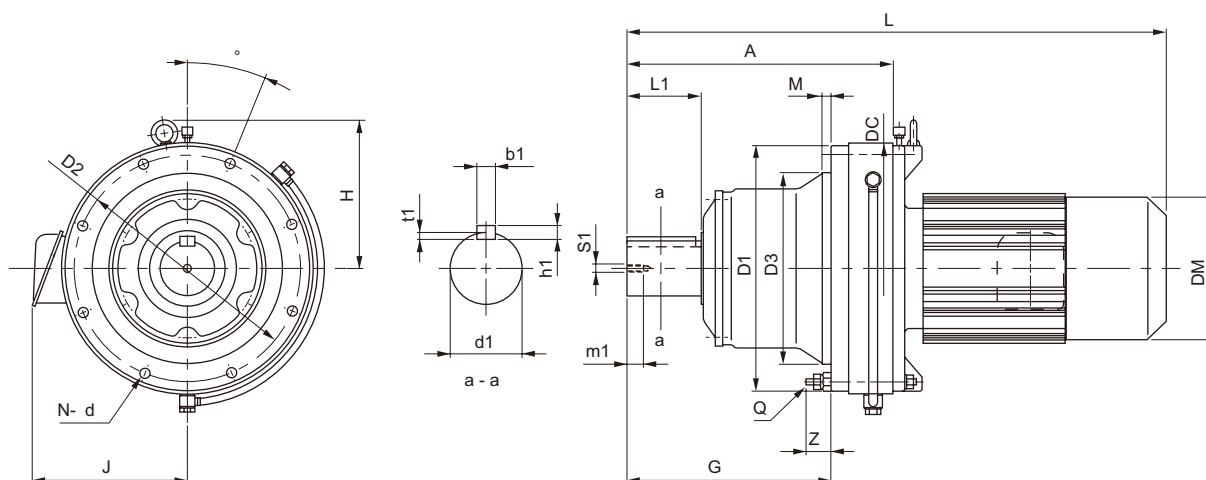
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "g6."

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 6205 to 6215

GEARMOTORS

Dimension Tables  
CHFM

| Frame size<br><div>Note: 5</div> | A   | G   | D1  | D2  | D3  | DC  | Q   | Z  | M  | N  | d    | $\alpha^\circ$ | Output Shaft <div>Note: 2, 3, 7</div> |     |    |    |    |     |    |
|----------------------------------|-----|-----|-----|-----|-----|-----|-----|----|----|----|------|----------------|---------------------------------------|-----|----|----|----|-----|----|
|                                  |     |     |     |     |     |     |     |    |    |    |      |                | d1                                    | L1  | b1 | h1 | t1 | S1  | m1 |
| 6205                             | 502 | 410 | 443 | 405 | 360 | 448 | M16 | 57 | 20 | 12 | 18   | 15             | 100                                   | 165 | 28 | 16 | 10 | M20 | 34 |
| 6215                             | 526 | 423 | 480 | 440 | 390 | 485 | M18 | 57 | 20 | 12 | 20.5 | 15             | 110                                   | 165 | 28 | 16 | 10 | M20 | 34 |

| Model<br><small>Note: 5, 6</small> | Motor |     | Standard |     |     |     |        |      |     | With Brake |     |        |      |     |
|------------------------------------|-------|-----|----------|-----|-----|-----|--------|------|-----|------------|-----|--------|------|-----|
|                                    | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L    | H   | J          | DM  | W [kg] | L    | H   |
| CHFM15 - 6205 - (B) - Ratio        | 11    | 4   | 972      | 283 | 211 | 251 | 270    | 1067 | 283 | 211        | 251 | 288    | 1067 | 283 |
| CHFM20 - 6205 - (B) - Ratio        | 15    | 4   | 1042     | 283 | 261 | 324 | 324    | 1147 | 283 | 261        | 324 | 360    | 1147 | 283 |
| CHFM206 - 6205 - (B) - Ratio       | 15    | 6   | 1127     | 283 | 340 | 394 | 399    | 1292 | 283 | 340        | 394 | 444    | 1292 | 283 |
| CHFM25 - 6205 - (B) - Ratio        | 18.5  | 4   | 1127     | 283 | 340 | 394 | 399    | 1292 | 283 | 340        | 394 | 444    | 1292 | 283 |
| CHFM30 - 6205 - (B) - Ratio        | 22    | 4   | 1127     | 283 | 340 | 394 | 399    | 1292 | 283 | 340        | 394 | 444    | 1292 | 283 |
| CHFM306 - 6205 - (B) - Ratio       | 22    | 6   | 1127     | 283 | 340 | 394 | 412    | 1292 | 283 | 340        | 394 | 457    | 1292 | 283 |
| CHFM40 - 6205 - (B) - Ratio        | 30    | 4   | 1127     | 283 | 340 | 394 | 412    | 1292 | 283 | 340        | 394 | 457    | 1292 | 283 |
| CHFM406 - 6205 - (B) - Ratio       | 30    | 6   | 1242     | 283 | 340 | 394 | 450    | 1457 | 283 | 340        | 394 | 544    | 1457 | 283 |
| CHFM50 - 6205 - (B) - Ratio        | 37    | 4   | 1242     | 283 | 340 | 394 | 450    | 1457 | 283 | 340        | 394 | 544    | 1457 | 283 |
| CHFM506 - 6205 - (B) - Ratio       | 37    | 6   | 1242     | 283 | 340 | 394 | 450    | 1457 | 283 | 340        | 394 | 544    | 1457 | 283 |
| CHFM60 - 6205 - (B) - Ratio        | 45    | 4   | 1242     | 283 | 340 | 394 | 450    | 1457 | 283 | 340        | 394 | 544    | 1457 | 283 |
| CHFM606 - 6205 - (B) - Ratio       | 45    | 6   | 1297     | 283 | 390 | 484 | 543    | -    | 283 | -          | -   | -      | -    | 283 |
| CHFM75 - 6205 - (B) - Ratio        | 55    | 4   | 1297     | 283 | 390 | 484 | 543    | -    | 283 | -          | -   | -      | -    | 283 |
| CHFM15 - 6215 - (B) - Ratio        | 11    | 4   | 996      | 312 | 211 | 251 | 350    | 1091 | 312 | 211        | 251 | 368    | 1091 | 312 |
| CHFM20 - 6215 - (B) - Ratio        | 15    | 4   | 1066     | 312 | 261 | 324 | 405    | 1171 | 312 | 261        | 324 | 440    | 1171 | 312 |
| CHFM206 - 6215 - (B) - Ratio       | 15    | 6   | 1151     | 312 | 340 | 394 | 474    | 1316 | 312 | 340        | 394 | 519    | 1316 | 312 |
| CHFM25 - 6215 - (B) - Ratio        | 18.5  | 4   | 1151     | 312 | 340 | 394 | 474    | 1316 | 312 | 340        | 394 | 519    | 1316 | 312 |
| CHFM256 - 6215 - (B) - Ratio       | 18.5  | 6   | 1151     | 312 | 340 | 394 | 487    | 1316 | 312 | 340        | 394 | 532    | 1316 | 312 |
| CHFM30 - 6215 - (B) - Ratio        | 22    | 4   | 1151     | 312 | 340 | 394 | 474    | 1316 | 312 | 340        | 394 | 519    | 1316 | 312 |
| CHFM306 - 6215 - (B) - Ratio       | 22    | 6   | 1151     | 312 | 340 | 394 | 487    | 1316 | 312 | 340        | 394 | 532    | 1316 | 312 |
| CHFM40 - 6215 - (B) - Ratio        | 30    | 4   | 1151     | 312 | 340 | 394 | 487    | 1316 | 312 | 340        | 394 | 532    | 1316 | 312 |
| CHFM406 - 6215 - (B) - Ratio       | 30    | 6   | 1266     | 312 | 340 | 394 | 525    | 1481 | 312 | 340        | 394 | 620    | 1481 | 312 |
| CHFM50 - 6215 - (B) - Ratio        | 37    | 4   | 1266     | 312 | 340 | 394 | 525    | 1481 | 312 | 340        | 394 | 620    | 1481 | 312 |
| CHFM506 - 6215 - (B) - Ratio       | 37    | 6   | 1266     | 312 | 340 | 394 | 525    | 1481 | 312 | 340        | 394 | 620    | 1481 | 312 |
| CHFM60 - 6215 - (B) - Ratio        | 45    | 4   | 1266     | 312 | 340 | 394 | 525    | 1481 | 312 | 340        | 394 | 620    | 1481 | 312 |
| CHFM606 - 6215 - (B) - Ratio       | 45    | 6   | 1321     | 312 | 390 | 484 | 635    | -    | 312 | -          | -   | -      | -    | 312 |
| CHFM75 - 6215 - (B) - Ratio        | 55    | 4   | 1321     | 312 | 390 | 484 | 635    | -    | 312 | -          | -   | -      | -    | 312 |

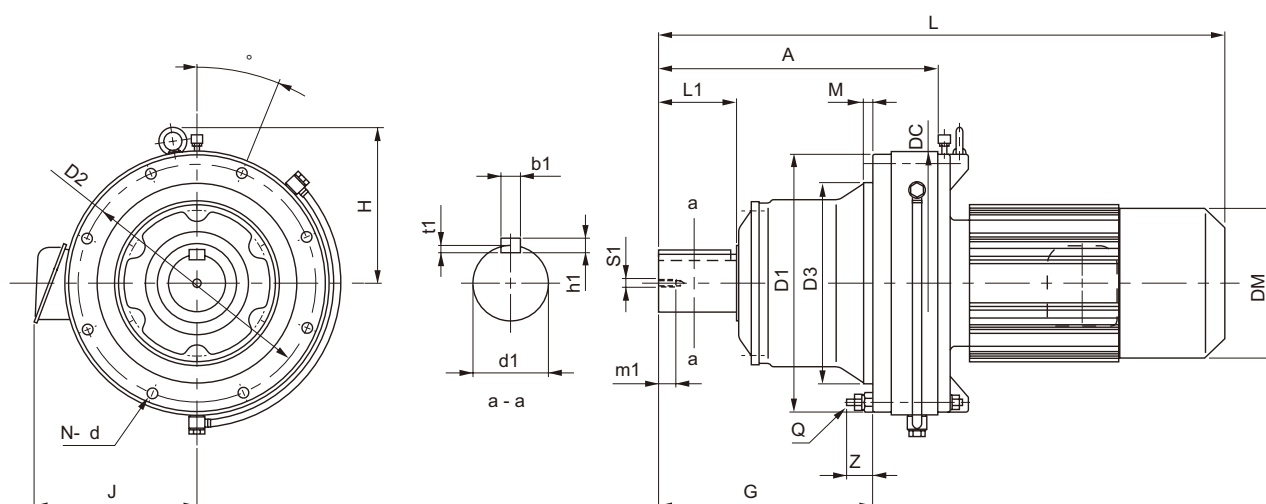
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 6225 to 6235

| Frame size<br>Note: 5 | A   | G   | D1  | D2  | D3  | DC  | Q   | Z  | M  | N  | d  | $\alpha^\circ$ | Output Shaft<br>Note: 2, 3, 7 |     |    |    |    |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----------------|-------------------------------|-----|----|----|----|-----|----|
|                       |     |     |     |     |     |     |     |    |    |    |    |                | d1                            | L1  | b1 | h1 | t1 | S1  | m1 |
| 6225                  | 566 | 454 | 521 | 475 | 420 | 526 | M20 | 60 | 20 | 12 | 22 | 15             | 120                           | 165 | 32 | 18 | 11 | M20 | 34 |
| 6235                  | 628 | 505 | 557 | 510 | 455 | 562 | M20 | 63 | 20 | 12 | 22 | 15             | 130                           | 200 | 32 | 18 | 11 | M24 | 41 |

| Model<br>Note: 5, 6          | Motor |     | Standard |     |     |     |        |      |     | With Brake |     |        |      |     |
|------------------------------|-------|-----|----------|-----|-----|-----|--------|------|-----|------------|-----|--------|------|-----|
|                              | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L    | H   | J          | DM  | W [kg] | L    | H   |
| CHFM206 - 6225 - (B) - Ratio | 15    | 6   | 1191     | 333 | 340 | 394 | 542    | 1356 | 333 | 340        | 394 | 587    | 1356 | 333 |
| CHFM25 - 6225 - (B) - Ratio  | 18.5  | 4   | 1191     | 333 | 340 | 394 | 542    | 1356 | 333 | 340        | 394 | 587    | 1356 | 333 |
| CHFM256 - 6225 - (B) - Ratio | 18.5  | 6   | 1191     | 333 | 340 | 394 | 555    | 1356 | 333 | 340        | 394 | 600    | 1356 | 333 |
| CHFM30 - 6225 - (B) - Ratio  | 22    | 4   | 1191     | 333 | 340 | 394 | 542    | 1356 | 333 | 340        | 394 | 587    | 1356 | 333 |
| CHFM306 - 6225 - (B) - Ratio | 22    | 6   | 1191     | 333 | 340 | 394 | 555    | 1356 | 333 | 340        | 394 | 600    | 1356 | 333 |
| CHFM40 - 6225 - (B) - Ratio  | 30    | 4   | 1191     | 333 | 340 | 394 | 555    | 1356 | 333 | 340        | 394 | 600    | 1356 | 333 |
| CHFM406 - 6225 - (B) - Ratio | 30    | 6   | 1306     | 333 | 340 | 394 | 593    | 1521 | 333 | 340        | 394 | 688    | 1521 | 333 |
| CHFM50 - 6225 - (B) - Ratio  | 37    | 4   | 1306     | 333 | 340 | 394 | 593    | 1521 | 333 | 340        | 394 | 688    | 1521 | 333 |
| CHFM506 - 6225 - (B) - Ratio | 37    | 6   | 1306     | 333 | 340 | 394 | 593    | 1521 | 333 | 340        | 394 | 688    | 1521 | 333 |
| CHFM60 - 6225 - (B) - Ratio  | 45    | 4   | 1306     | 333 | 340 | 394 | 593    | 1521 | 333 | 340        | 394 | 688    | 1521 | 333 |
| CHFM606 - 6225 - (B) - Ratio | 45    | 6   | 1361     | 333 | 390 | 484 | 692    | -    | -   | -          | -   | -      | -    | -   |
| CHFM75 - 6225 - (B) - Ratio  | 55    | 4   | 1361     | 333 | 390 | 484 | 692    | -    | -   | -          | -   | -      | -    | -   |
| CHFM206 - 6235 - (B) - Ratio | 15    | 6   | 1253     | 351 | 340 | 394 | 627    | 1418 | 351 | 340        | 394 | 658    | 1418 | 351 |
| CHFM256 - 6235 - (B) - Ratio | 18.5  | 6   | 1253     | 351 | 340 | 394 | 627    | 1418 | 351 | 340        | 394 | 672    | 1418 | 351 |
| CHFM306 - 6235 - (B) - Ratio | 22    | 6   | 1253     | 351 | 340 | 394 | 627    | 1418 | 351 | 340        | 394 | 672    | 1418 | 351 |
| CHFM406 - 6235 - (B) - Ratio | 30    | 6   | 1368     | 351 | 340 | 394 | 673    | 1583 | 351 | 340        | 394 | 761    | 1583 | 351 |
| CHFM506 - 6235 - (B) - Ratio | 37    | 6   | 1368     | 351 | 340 | 394 | 673    | 1583 | 351 | 340        | 394 | 761    | 1583 | 351 |
| CHFM606 - 6235 - (B) - Ratio | 45    | 6   | 1423     | 351 | 390 | 484 | 762    | -    | -   | -          | -   | -      | -    | -   |
| CHFM756 - 6235 - (B) - Ratio | 55    | 6   | 1503     | 351 | 390 | 485 | 816    | -    | -   | -          | -   | -      | -    | -   |

Note: 1. [ ] indicates motor capacity.

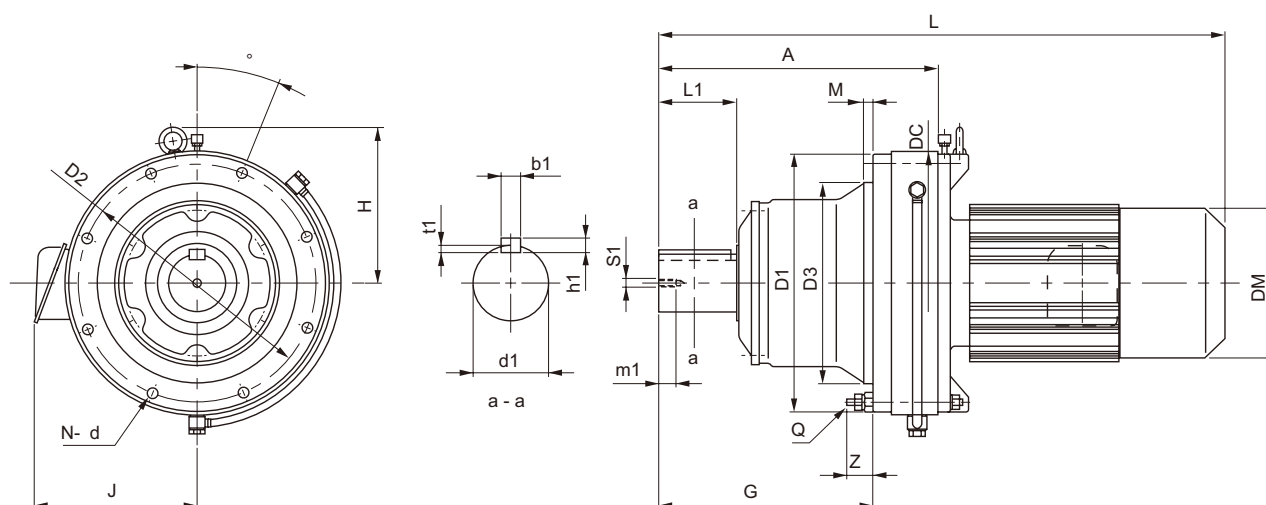
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D_3$ ): Dimension tolerance conforms to JIS B 0401-1976 "g6."



## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 6245 to 6265

GEARMOTORS

Dimension Tables  
CHFM

| Frame size<br>Note: 5 | A   | G   | D1  | D2  | D3  | DC  | Q   | Z  | M  | N  | d  | $\alpha^\circ$ | Output Shaft<br>Note: 2, 3, 7 |     |    |    |    |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----------------|-------------------------------|-----|----|----|----|-----|----|
|                       |     |     |     |     |     |     |     |    |    |    |    |                | d1                            | L1  | b1 | h1 | t1 | S1  | m1 |
| 6245                  | 657 | 529 | 615 | 560 | 500 | 614 | M24 | 65 | 25 | 12 | 27 | 15             | 140                           | 200 | 36 | 20 | 12 | M24 | 41 |
| 6255                  | 775 | 616 | 666 | 610 | 540 | 670 | M24 | 86 | 30 | 12 | 27 | 15             | 160                           | 240 | 40 | 22 | 13 | M30 | 49 |
| 6265                  | 892 | 712 | 730 | 660 | 570 | 736 | M30 | 82 | 40 | 12 | 34 | 15             | 170                           | 300 | 40 | 22 | 13 | M30 | 49 |

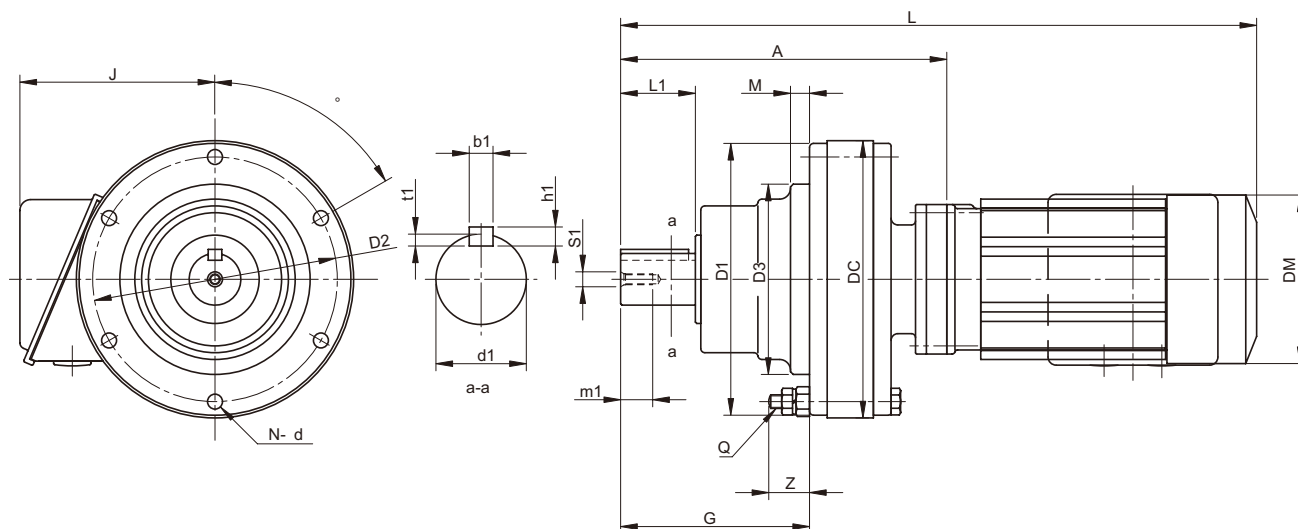
| Model<br>Note: 5, 6          | Motor |     | Standard |     |     |     |        |      |     | With Brake |     |        |      |     |
|------------------------------|-------|-----|----------|-----|-----|-----|--------|------|-----|------------|-----|--------|------|-----|
|                              | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L    | H   | J          | DM  | W [kg] | L    | H   |
| CHFM206 - 6245 - (B) - Ratio | 15    | 6   | 1282     | 359 | 340 | 394 | 747    | 1447 | 359 | 340        | 394 | 780    | 1447 | 359 |
| CHFM256 - 6245 - (B) - Ratio | 18.5  | 6   | 1282     | 359 | 340 | 394 | 747    | 1447 | 359 | 340        | 394 | 794    | 1447 | 359 |
| CHFM306 - 6245 - (B) - Ratio | 22    | 6   | 1282     | 359 | 340 | 394 | 747    | 1447 | 359 | 340        | 394 | 794    | 1447 | 359 |
| CHFM406 - 6245 - (B) - Ratio | 30    | 6   | 1397     | 359 | 340 | 394 | 793    | 1612 | 359 | 340        | 394 | 881    | 1612 | 359 |
| CHFM506 - 6245 - (B) - Ratio | 37    | 6   | 1397     | 359 | 340 | 394 | 793    | 1612 | 359 | 340        | 394 | 881    | 1612 | 359 |
| CHFM606 - 6245 - (B) - Ratio | 45    | 6   | 1452     | 359 | 390 | 484 | 884    | -    | 359 | -          | -   | -      | -    | 359 |
| CHFM756 - 6245 - (B) - Ratio | 55    | 6   | 1532     | 359 | 390 | 485 | 933    | -    | 359 | -          | -   | -      | -    | 359 |
| CHFM256 - 6255 - (B) - Ratio | 18.5  | 6   | 1400     | 386 | 340 | 394 | 992    | 1565 | 386 | 340        | 394 | 1039   | 1565 | 386 |
| CHFM306 - 6255 - (B) - Ratio | 22    | 6   | 1400     | 386 | 340 | 394 | 992    | 1565 | 386 | 340        | 394 | 1039   | 1565 | 386 |
| CHFM406 - 6255 - (B) - Ratio | 30    | 6   | 1515     | 386 | 340 | 394 | 1037   | 1730 | 386 | 340        | 394 | 1125   | 1730 | 386 |
| CHFM506 - 6255 - (B) - Ratio | 37    | 6   | 1515     | 386 | 340 | 394 | 1037   | 1730 | 386 | 340        | 394 | 1125   | 1730 | 386 |
| CHFM606 - 6255 - (B) - Ratio | 45    | 6   | 1570     | 386 | 390 | 484 | 1117   | -    | -   | -          | -   | -      | -    | -   |
| CHFM756 - 6255 - (B) - Ratio | 55    | 6   | 1650     | 386 | 390 | 485 | 1172   | -    | -   | -          | -   | -      | -    | -   |
| CHFM306 - 6265 - (B) - Ratio | 22    | 6   | 1517     | 453 | 340 | 394 | 1230   | 1727 | 453 | 340        | 394 | 1277   | 1727 | 453 |
| CHFM406 - 6265 - (B) - Ratio | 30    | 6   | 1632     | 453 | 340 | 394 | 1275   | 1847 | 453 | 340        | 394 | 1363   | 1847 | 453 |
| CHFM506 - 6265 - (B) - Ratio | 37    | 6   | 1632     | 453 | 340 | 394 | 1275   | 1847 | 453 | 340        | 394 | 1363   | 1847 | 453 |
| CHFM606 - 6265 - (B) - Ratio | 45    | 6   | 1687     | 453 | 390 | 484 | 1370   | -    | -   | -          | -   | -      | -    | -   |

Note: 5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Universal Direction, Flange Mount)

CNFM<sup>Note: 1</sup> - 606□DA to 612□DB

| Frame size<br>Note: 5 | A   | G   | D1  | D2  | D3  | DC  | Q   | Z  | M  | N | d   | $\alpha^\circ$ | Output Shaft<br>Note: 2, 3, 7 |    |    |    |     |    |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|----|----|---|-----|----------------|-------------------------------|----|----|----|-----|----|----|
|                       |     |     |     |     |     |     |     |    |    |   |     |                | d1                            | L1 | b1 | h1 | t1  | S1 | m1 |
| 606□DA                | 125 | 68  | 110 | 98  | 80  | 110 | M6  | 23 | 4  | 6 | 6.6 | 60             | 14                            | 25 | 5  | 5  | 3   | M5 | 16 |
| 607□DA                | 131 | 74  | 110 | 98  | 80  | 110 | M6  | 23 | 4  | 6 | 6.6 | 60             | 18                            | 30 | 6  | 6  | 3.5 | M6 | 16 |
| 609□DA                | 190 | 114 | 150 | 134 | 105 | 150 | M8  | 28 | 6  | 8 | 9   | 22.5           | 28                            | 35 | 8  | 7  | 4   | M8 | 20 |
| 610□DA                | 204 | 114 | 150 | 134 | 105 | 150 | M8  | 28 | 6  | 8 | 9   | 22.5           | 28                            | 35 | 8  | 7  | 4   | M8 | 20 |
| 612□DA                | 240 | 139 | 200 | 180 | 140 | 204 | M10 | 33 | 14 | 6 | 11  | 60             | 38                            | 55 | 10 | 8  | 5   | M8 | 20 |
| 612□DB                | 252 | 139 | 200 | 180 | 140 | 204 | M10 | 33 | 14 | 6 | 11  | 60             | 38                            | 55 | 10 | 8  | 5   | M8 | 20 |

| Model<br>Note: 5, 6           | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CNFM01 - 606□DA - (B) - Ratio | 0.1   | 4   | 287      | 113 | 119 | 8      | 294        | 113 | 124 | 9.5    |
| CNFM01 - 607□DA - (B) - Ratio | 0.1   | 4   | 293      | 113 | 119 | 9      | 300        | 113 | 124 | 10.5   |
| CNFM02 - 607□DA - (B) - Ratio | 0.2   | 4   | 311      | 113 | 124 | 10     | 339        | 113 | 124 | 12     |
| CNFM01 - 609□DA - (B) - Ratio | 0.1   | 4   | 352      | 113 | 119 | 14     | 359        | 113 | 124 | 15     |
| CNFM02 - 609□DA - (B) - Ratio | 0.2   | 4   | 370      | 113 | 124 | 15     | 398        | 113 | 124 | 16     |
| CNFM03 - 609□DA - (B) - Ratio | 0.25  | 4   | 370      | 113 | 124 | 15     | 398        | 113 | 124 | 16     |
| CNFM05 - 609□DA - (B) - Ratio | 0.4   | 4   | 386      | 113 | 124 | 16     | 418        | 113 | 124 | 17     |
| CNFM01 - 610□DA - (B) - Ratio | 0.1   | 4   | 366      | 113 | 119 | 15     | 373        | 113 | 124 | 16     |
| CNFM02 - 610□DA - (B) - Ratio | 0.2   | 4   | 384      | 113 | 124 | 16     | 412        | 113 | 124 | 17     |
| CNFM03 - 610□DA - (B) - Ratio | 0.25  | 4   | 384      | 113 | 124 | 16     | 412        | 113 | 124 | 17     |
| CNFM05 - 610□DA - (B) - Ratio | 0.4   | 4   | 400      | 113 | 124 | 17     | 432        | 113 | 124 | 18     |
| CNFM01 - 612□DA - (B) - Ratio | 0.1   | 4   | 402      | 113 | 119 | 26     | 409        | 113 | 124 | 27     |
| CNFM02 - 612□DA - (B) - Ratio | 0.2   | 4   | 420      | 113 | 124 | 27     | 448        | 113 | 124 | 28     |
| CNFM03 - 612□DA - (B) - Ratio | 0.25  | 4   | 420      | 113 | 124 | 27     | 448        | 113 | 124 | 28     |
| CNFM05 - 612□DA - (B) - Ratio | 0.4   | 4   | 436      | 113 | 124 | 28     | 468        | 113 | 124 | 29     |
| CNFM01 - 612□DB - (B) - Ratio | 0.1   | 4   | 414      | 113 | 119 | 29     | 421        | 113 | 124 | 31     |
| CNFM02 - 612□DB - (B) - Ratio | 0.2   | 4   | 432      | 113 | 124 | 30     | 473        | 113 | 124 | 32     |
| CNFM03 - 612□DB - (B) - Ratio | 0.25  | 4   | 432      | 113 | 124 | 30     | 473        | 113 | 124 | 32     |
| CNFM05 - 612□DB - (B) - Ratio | 0.4   | 4   | 448      | 113 | 124 | 31     | 473        | 113 | 124 | 33     |
| CNFM08 - 612□DB - (B) - Ratio | 0.55  | 4   | 489      | 143 | 160 | 35     | 532        | 143 | 160 | 38     |
| CNFM1 - 612□DB - (B) - Ratio  | 0.75  | 4   | 489      | 143 | 160 | 35     | 532        | 143 | 160 | 38     |
| CNFM1H - 612□DB - (B) - Ratio | 1.1   | 4   | 516      | 148 | 169 | 39     | 578        | 148 | 169 | 44     |
| CNFM2 - 612□DB - (B) - Ratio  | 1.5   | 4   | 516      | 148 | 169 | 39     | 578        | 148 | 169 | 44     |

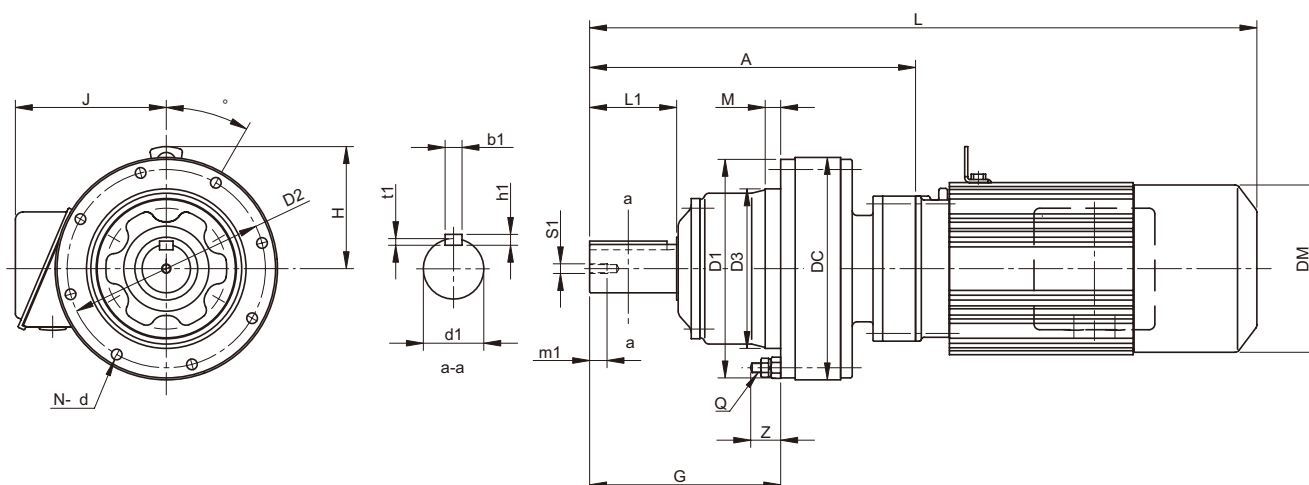
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "g6."

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 613□DA to 614□DC

| Frame size<br><small>Note: 5</small> | A   | G   | D1  | D2  | D3  | DC  | H   | Q   | Z  | M  | N | d  | $\alpha^\circ$ | Output Shaft<br><small>Note: 2, 3, 7</small> |    |    |    |     |     |    |
|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|----|----------------|----------------------------------------------|----|----|----|-----|-----|----|
|                                      |     |     |     |     |     |     |     |     |    |    |   |    |                | d1                                           | L1 | b1 | h1 | t1  | S1  | m1 |
| 613□DA                               | 294 | 178 | 226 | 205 | 165 | 230 | 150 | M10 | 31 | 16 | 6 | 11 | 60             | 50                                           | 70 | 14 | 9  | 5.5 | M10 | 18 |
| 613□DB                               | 303 | 178 | 226 | 205 | 165 | 230 | 150 | M10 | 31 | 16 | 6 | 11 | 60             | 50                                           | 70 | 14 | 9  | 5.5 | M10 | 18 |
| 613□DC                               | 317 | 178 | 226 | 205 | 165 | 230 | 150 | M10 | 31 | 16 | 6 | 11 | 60             | 50                                           | 70 | 14 | 9  | 5.5 | M10 | 18 |
| 614□DA                               | 314 | 198 | 226 | 205 | 165 | 230 | 150 | M10 | 31 | 16 | 6 | 11 | 60             | 50                                           | 90 | 14 | 9  | 5.5 | M10 | 18 |
| 614□DB                               | 323 | 198 | 226 | 205 | 165 | 230 | 150 | M10 | 31 | 16 | 6 | 11 | 60             | 50                                           | 90 | 14 | 9  | 5.5 | M10 | 18 |
| 614□DC                               | 337 | 198 | 226 | 205 | 165 | 230 | 150 | M10 | 31 | 16 | 6 | 11 | 60             | 50                                           | 90 | 14 | 9  | 5.5 | M10 | 18 |

| Model<br><small>Note: 5, 6</small> | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                                    | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CHFM02 - 613□DA - (B) - Ratio      | 0.2   | 4   | 474      | 113 | 124 | 40     | 502        | 113 | 124 | 41     |
| CHFM03 - 613□DA - (B) - Ratio      | 0.25  | 4   | 474      | 113 | 124 | 40     | 522        | 113 | 124 | 41     |
| CHFM05 - 613□DA - (B) - Ratio      | 0.4   | 4   | 490      | 113 | 124 | 41     | 522        | 113 | 124 | 42     |
| CHFM02 - 613□DB - (B) - Ratio      | 0.2   | 4   | 483      | 113 | 124 | 42     | 511        | 113 | 124 | 44     |
| CHFM03 - 613□DB - (B) - Ratio      | 0.25  | 4   | 483      | 113 | 124 | 42     | 511        | 113 | 124 | 44     |
| CHFM05 - 613□DB - (B) - Ratio      | 0.4   | 4   | 499      | 113 | 124 | 43     | 531        | 113 | 124 | 45     |
| CHFM08 - 613□DB - (B) - Ratio      | 0.55  | 4   | 540      | 143 | 160 | 47     | 583        | 143 | 160 | 50     |
| CHFM1 - 613□DB - (B) - Ratio       | 0.75  | 4   | 540      | 143 | 160 | 47     | 583        | 143 | 160 | 50     |
| CHFM1H - 613□DB - (B) - Ratio      | 1.1   | 4   | 573      | 148 | 169 | 51     | 635        | 148 | 169 | 56     |
| CHFM2 - 613□DB - (B) - Ratio       | 1.5   | 4   | 573      | 148 | 169 | 51     | 635        | 148 | 169 | 56     |
| CHFM08 - 613□DC - (B) - Ratio      | 0.55  | 4   | 554      | 143 | 160 | 49     | 597        | 143 | 160 | 52     |
| CHFM1 - 613□DC - (B) - Ratio       | 0.75  | 4   | 554      | 143 | 160 | 49     | 597        | 143 | 160 | 52     |
| CHFM2 - 613□DC - (B) - Ratio       | 1.5   | 4   | 587      | 148 | 169 | 53     | 649        | 148 | 169 | 58     |
| CHFM3 - 613□DC - (B) - Ratio       | 2.2   | 4   | 607      | 155 | 182 | 57     | 670        | 155 | 182 | 63     |
| CHFM02 - 614□DA - (B) - Ratio      | 0.2   | 4   | 494      | 113 | 124 | 40     | 522        | 113 | 124 | 41     |
| CHFM03 - 614□DA - (B) - Ratio      | 0.25  | 4   | 494      | 113 | 124 | 40     | 522        | 113 | 124 | 41     |
| CHFM05 - 614□DA - (B) - Ratio      | 0.4   | 4   | 510      | 113 | 124 | 41     | 542        | 113 | 124 | 42     |
| CHFM02 - 614□DB - (B) - Ratio      | 0.2   | 4   | 503      | 113 | 124 | 42     | 531        | 113 | 124 | 44     |
| CHFM03 - 614□DB - (B) - Ratio      | 0.25  | 4   | 503      | 113 | 124 | 42     | 531        | 113 | 124 | 44     |
| CHFM05 - 614□DB - (B) - Ratio      | 0.4   | 4   | 519      | 113 | 124 | 43     | 551        | 113 | 124 | 47     |
| CHFM08 - 614□DB - (B) - Ratio      | 0.55  | 4   | 560      | 143 | 160 | 47     | 603        | 143 | 160 | 50     |
| CHFM1 - 614□DB - (B) - Ratio       | 0.75  | 4   | 560      | 143 | 160 | 47     | 603        | 143 | 160 | 50     |
| CHFM1H - 614□DB - (B) - Ratio      | 1.1   | 4   | 593      | 148 | 169 | 51     | 655        | 148 | 169 | 54     |
| CHFM2 - 614□DB - (B) - Ratio       | 1.5   | 4   | 593      | 148 | 169 | 51     | 655        | 148 | 169 | 54     |
| CHFM08 - 614□DC - (B) - Ratio      | 0.55  | 4   | 574      | 143 | 160 | 49     | 617        | 143 | 160 | 52     |
| CHFM1 - 614□DC - (B) - Ratio       | 0.75  | 4   | 574      | 143 | 160 | 49     | 617        | 143 | 160 | 52     |
| CHFM1H - 614□DC - (B) - Ratio      | 1.1   | 4   | 607      | 148 | 169 | 53     | 669        | 148 | 169 | 58     |
| CHFM2 - 614□DC - (B) - Ratio       | 1.5   | 4   | 607      | 148 | 169 | 53     | 669        | 148 | 169 | 58     |
| CHFM3 - 614□DC - (B) - Ratio       | 2.2   | 4   | 627      | 155 | 182 | 57     | 690        | 155 | 182 | 63     |

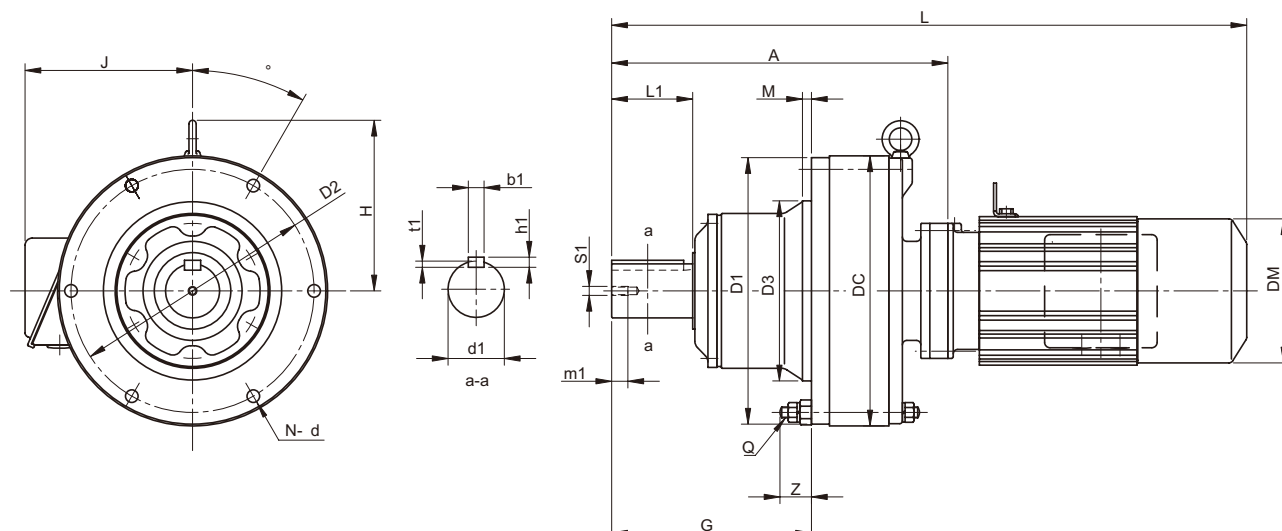
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 616□DA to 618□DA

| Frame size<br>Note: 5 | A   | G   | D1  | D2  | D3  | DC  | H   | Q   | Z  | M  | N | d  | $\alpha^\circ$ | Output Shaft<br>Note: 2, 3, 7 |     |    |    |     |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|----|----------------|-------------------------------|-----|----|----|-----|-----|----|
|                       |     |     |     |     |     |     |     |     |    |    |   |    |                | d1                            | L1  | b1 | h1 | t1  | S1  | m1 |
| 616□DA                | 373 | 222 | 296 | 270 | 200 | 300 | 189 | M12 | 35 | 10 | 6 | 14 | 30             | 60                            | 90  | 18 | 11 | 7   | M10 | 18 |
| 616□DB                | 387 | 222 | 296 | 270 | 200 | 300 | 189 | M12 | 35 | 10 | 6 | 14 | 30             | 60                            | 90  | 18 | 11 | 7   | M10 | 18 |
| 617□DA                | 418 | 262 | 330 | 300 | 250 | 340 | 216 | M12 | 41 | 12 | 8 | 14 | 22.5           | 70                            | 90  | 20 | 12 | 7.5 | M12 | 24 |
| 617□DB                | 432 | 262 | 330 | 300 | 250 | 340 | 216 | M12 | 41 | 12 | 8 | 14 | 22.5           | 70                            | 90  | 20 | 12 | 7.5 | M12 | 24 |
| 618□DA                | 474 | 299 | 360 | 330 | 280 | 370 | 231 | M12 | 38 | 12 | 8 | 14 | 22.5           | 80                            | 110 | 22 | 14 | 9   | M12 | 24 |

| Model<br>Note: 5, 6           | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CHFM02 - 616□DA - (B) - Ratio | 0.2   | 4   | 553      | 113 | 124 | 72     | 581        | 113 | 124 | 74     |
| CHFM03 - 616□DA - (B) - Ratio | 0.25  | 4   | 553      | 113 | 124 | 72     | 581        | 113 | 124 | 74     |
| CHFM05 - 616□DA - (B) - Ratio | 0.4   | 4   | 569      | 113 | 124 | 73     | 601        | 113 | 124 | 75     |
| CHFM08 - 616□DA - (B) - Ratio | 0.55  | 4   | 610      | 143 | 160 | 77     | 653        | 143 | 160 | 80     |
| CHFM1 - 616□DA - (B) - Ratio  | 0.75  | 4   | 610      | 143 | 160 | 77     | 653        | 143 | 160 | 80     |
| CHFM1H - 616□DA - (B) - Ratio | 1.1   | 4   | 643      | 148 | 169 | 81     | 705        | 148 | 169 | 86     |
| CHFM2 - 616□DA - (B) - Ratio  | 1.5   | 4   | 643      | 148 | 169 | 81     | 705        | 148 | 169 | 86     |
| CHFM08 - 616□DB - (B) - Ratio | 0.55  | 4   | 624      | 143 | 160 | 79     | 667        | 143 | 160 | 82     |
| CHFM1 - 616□DB - (B) - Ratio  | 0.75  | 4   | 624      | 143 | 160 | 79     | 667        | 143 | 160 | 82     |
| CHFM1H - 616□DB - (B) - Ratio | 1.1   | 4   | 657      | 148 | 169 | 83     | 719        | 148 | 169 | 88     |
| CHFM2 - 616□DB - (B) - Ratio  | 1.5   | 4   | 657      | 148 | 169 | 83     | 719        | 148 | 169 | 88     |
| CHFM3 - 616□DB - (B) - Ratio  | 2.2   | 4   | 677      | 155 | 182 | 87     | 740        | 155 | 182 | 93     |
| CHFM02 - 617□DA - (B) - Ratio | 0.2   | 4   | 598      | 113 | 124 | 92     | 626        | 113 | 124 | 94     |
| CHFM03 - 617□DA - (B) - Ratio | 0.25  | 4   | 598      | 113 | 124 | 92     | 626        | 113 | 124 | 94     |
| CHFM05 - 617□DA - (B) - Ratio | 0.4   | 4   | 614      | 113 | 124 | 93     | 646        | 113 | 124 | 95     |
| CHFM08 - 617□DA - (B) - Ratio | 0.55  | 4   | 655      | 143 | 160 | 97     | 698        | 143 | 160 | 100    |
| CHFM1 - 617□DA - (B) - Ratio  | 0.75  | 4   | 655      | 143 | 160 | 97     | 698        | 143 | 160 | 100    |
| CHFM1H - 617□DA - (B) - Ratio | 1.1   | 4   | 688      | 148 | 169 | 101    | 750        | 148 | 169 | 106    |
| CHFM2 - 617□DA - (B) - Ratio  | 1.5   | 4   | 688      | 148 | 169 | 101    | 750        | 148 | 169 | 106    |
| CHFM08 - 617□DB - (B) - Ratio | 0.55  | 4   | 669      | 143 | 160 | 98     | 712        | 143 | 160 | 101    |
| CHFM1 - 617□DB - (B) - Ratio  | 0.75  | 4   | 669      | 143 | 160 | 98     | 712        | 143 | 160 | 101    |
| CHFM1H - 617□DB - (B) - Ratio | 1.1   | 4   | 702      | 148 | 169 | 102    | 764        | 148 | 169 | 107    |
| CHFM2 - 617□DB - (B) - Ratio  | 1.5   | 4   | 702      | 148 | 169 | 102    | 764        | 148 | 169 | 107    |
| CHFM3 - 617□DB - (B) - Ratio  | 2.2   | 4   | 722      | 155 | 182 | 106    | 785        | 155 | 182 | 112    |
| CHFM05 - 618□DA - (B) - Ratio | 0.4   | 4   | 670      | 113 | 124 | 136    | 702        | 113 | 124 | 138    |
| CHFM08 - 618□DA - (B) - Ratio | 0.55  | 4   | 711      | 143 | 160 | 140    | 754        | 143 | 160 | 143    |
| CHFM1 - 618□DA - (B) - Ratio  | 0.75  | 4   | 711      | 143 | 160 | 140    | 754        | 143 | 160 | 143    |
| CHFM1H - 618□DA - (B) - Ratio | 1.1   | 4   | 744      | 148 | 169 | 144    | 806        | 148 | 169 | 149    |
| CHFM2 - 618□DA - (B) - Ratio  | 1.5   | 4   | 744      | 148 | 169 | 144    | 806        | 148 | 169 | 149    |
| CHFM3 - 618□DA - (B) - Ratio  | 2.2   | 4   | 764      | 155 | 182 | 148    | 827        | 155 | 182 | 154    |

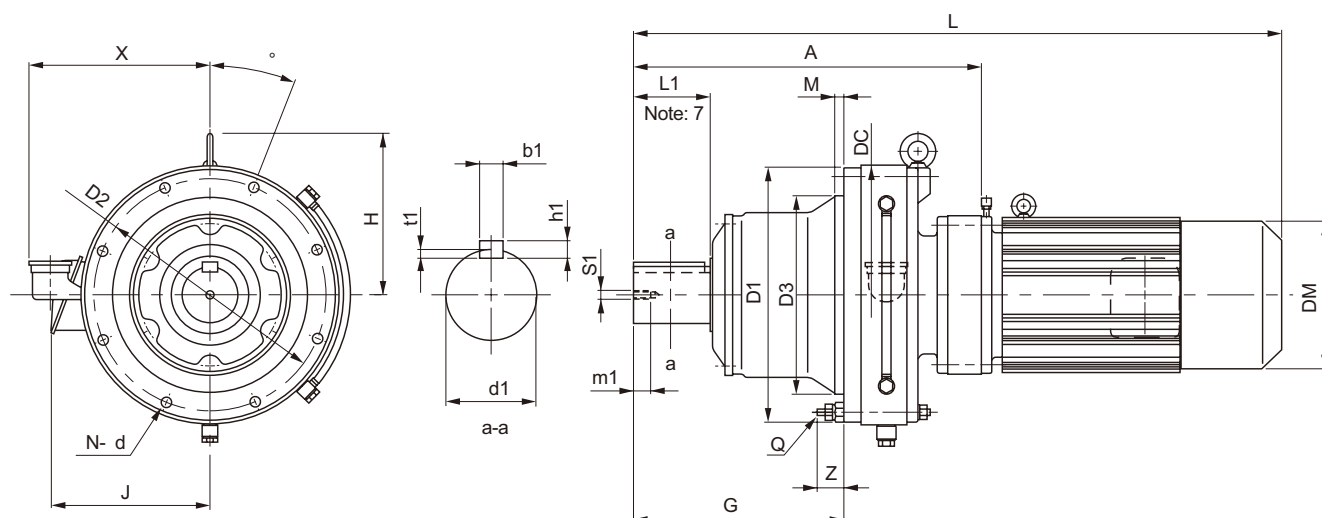
Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "g6."

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 616□DC to 618□DB

GEARMOTORS

Dimension Tables  
CHFM

| Frame size<br><small>Note: 5</small> | A   | G   | D1  | D2  | D3  | DC  | H   | Q   | Z  | M  | N | d  | $\alpha^\circ$ | X   | Output Shaft <small>Note: 2, 3, 7</small> |     |    |    |     |     |    |
|--------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|----|----------------|-----|-------------------------------------------|-----|----|----|-----|-----|----|
|                                      |     |     |     |     |     |     |     |     |    |    |   |    |                |     | d1                                        | L1  | b1 | h1 | t1  | S1  | m1 |
| 616□DC                               | 389 | 222 | 296 | 270 | 200 | 300 | 189 | M12 | 35 | 10 | 6 | 14 | 30             | 228 | 60                                        | 90  | 18 | 11 | 7   | M10 | 18 |
| 617□DC                               | 436 | 262 | 330 | 300 | 250 | 340 | 216 | M12 | 41 | 12 | 8 | 14 | 22.5           | 243 | 70                                        | 90  | 20 | 12 | 7.5 | M12 | 24 |
| 618□DB                               | 496 | 299 | 360 | 330 | 280 | 370 | 231 | M12 | 38 | 12 | 8 | 14 | 22.5           | 258 | 80                                        | 110 | 22 | 14 | 9   | M12 | 24 |

| Model<br><small>Note: 5, 6</small> | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                                    | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CHFM1H - 616□DC - (B) - Ratio      | 1.1   | 4   | 659      | 148 | 169 | 89     | 721        | 148 | 169 | 94     |
| CHFM2 - 616□DC - (B) - Ratio       | 1.5   | 4   | 659      | 148 | 169 | 89     | 721        | 148 | 169 | 94     |
| CHFM3 - 616□DC - (B) - Ratio       | 2.2   | 4   | 679      | 155 | 182 | 93     | 742        | 155 | 182 | 100    |
| CHFM4 - 616□DC - (B) - Ratio       | 3.0   | 4   | 702      | 166 | 222 | 103    | 774        | 166 | 222 | 113    |
| CHFM5 - 616□DC - (B) - Ratio       | 3.7   | 4   | 702      | 166 | 222 | 103    | 774        | 166 | 222 | 113    |
| CHFM8 - 616□DC - (B) - Ratio       | 5.5   | 4   | 746      | 166 | 222 | 110    | 818        | 166 | 222 | 120    |
| CHFM1H - 617□DC - (B) - Ratio      | 1.1   | 4   | 706      | 148 | 169 | 113    | 768        | 148 | 169 | 118    |
| CHFM2 - 617□DC - (B) - Ratio       | 1.5   | 4   | 706      | 148 | 169 | 113    | 768        | 148 | 169 | 118    |
| CHFM3 - 617□DC - (B) - Ratio       | 2.2   | 4   | 726      | 155 | 182 | 117    | 789        | 155 | 182 | 124    |
| CHFM4 - 617□DC - (B) - Ratio       | 3.0   | 4   | 749      | 166 | 222 | 127    | 821        | 166 | 222 | 137    |
| CHFM5 - 617□DC - (B) - Ratio       | 3.7   | 4   | 749      | 166 | 222 | 127    | 821        | 166 | 222 | 137    |
| CHFM8 - 617□DC - (B) - Ratio       | 5.5   | 4   | 793      | 166 | 222 | 134    | 865        | 166 | 222 | 144    |
| CHFM1H - 618□DB - (B) - Ratio      | 1.1   | 4   | 766      | 148 | 169 | 159    | 828        | 148 | 169 | 164    |
| CHFM2 - 618□DB - (B) - Ratio       | 1.5   | 4   | 766      | 148 | 169 | 159    | 828        | 148 | 169 | 164    |
| CHFM3 - 618□DB - (B) - Ratio       | 2.2   | 4   | 786      | 155 | 182 | 162    | 849        | 155 | 182 | 169    |
| CHFM4 - 618□DB - (B) - Ratio       | 3.0   | 4   | 809      | 166 | 222 | 172    | 881        | 166 | 222 | 182    |
| CHFM5 - 618□DB - (B) - Ratio       | 3.7   | 4   | 809      | 166 | 222 | 172    | 881        | 166 | 222 | 182    |
| CHFM8 - 618□DB - (B) - Ratio       | 5.5   | 4   | 853      | 166 | 222 | 179    | 925        | 166 | 222 | 189    |
| CHFM10 - 618□DB - (B) - Ratio      | 7.5   | 4   | 876      | 211 | 251 | 194    | 971        | 211 | 251 | 212    |
| CHFM15 - 618□DB - (B) - Ratio      | 11    | 4   | 936      | 211 | 251 | 208    | 1031       | 211 | 251 | 226    |

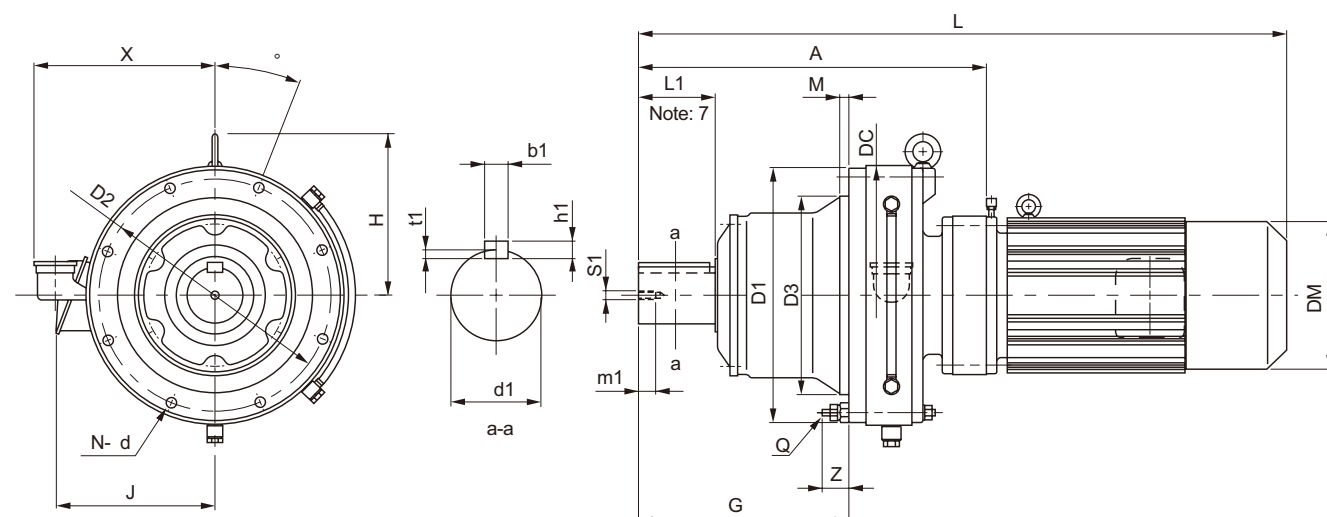
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 619□DA to 619□DB

| Frame size<br>Note: 5 | A   | G   | D1  | D2  | D3  | DC  | H   | Q   | Z  | M  | N  | d  | α° | X   | Output Shaft<br>Note: 2, 3, 7 |     |    |    |    |     |    |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|-----|-------------------------------|-----|----|----|----|-----|----|
|                       |     |     |     |     |     |     |     |     |    |    |    |    |    |     | d1                            | L1  | b1 | h1 | t1 | S1  | m1 |
| 619□DA                | 556 | 365 | 420 | 380 | 320 | 430 | 281 | M12 | 43 | 10 | 12 | 14 | 15 | 285 | 95                            | 135 | 25 | 14 | 9  | M20 | 34 |
| 619□DB                | 572 | 365 | 420 | 380 | 320 | 430 | 281 | M12 | 43 | 10 | 12 | 14 | 15 | 285 | 95                            | 135 | 25 | 14 | 9  | M20 | 34 |

| Model<br>Note: 5, 6           | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CHFM1 - 619□DA - (B) - Ratio  | 0.75  | 4   | 793      | 143 | 160 | 201    | 836        | 143 | 160 | 204    |
| CHFM1H - 619□DA - (B) - Ratio | 1.1   | 4   | 826      | 148 | 169 | 205    | 888        | 148 | 169 | 210    |
| CHFM2 - 619□DA - (B) - Ratio  | 1.5   | 4   | 826      | 148 | 169 | 205    | 888        | 148 | 169 | 210    |
| CHFM3 - 619□DA - (B) - Ratio  | 2.2   | 4   | 846      | 155 | 182 | 209    | 909        | 155 | 182 | 216    |
| CHFM4 - 619□DA - (B) - Ratio  | 3.0   | 4   | 869      | 166 | 222 | 219    | 941        | 166 | 222 | 229    |
| CHFM5 - 619□DA - (B) - Ratio  | 3.7   | 4   | 869      | 166 | 222 | 219    | 941        | 166 | 222 | 229    |
| CHFM8 - 619□DA - (B) - Ratio  | 5.5   | 4   | 913      | 166 | 222 | 226    | 985        | 166 | 222 | 236    |
| CHFM2 - 619□DB - (B) - Ratio  | 1.5   | 4   | 842      | 148 | 169 | 212    | 904        | 148 | 169 | 217    |
| CHFM3 - 619□DB - (B) - Ratio  | 2.2   | 4   | 862      | 155 | 182 | 216    | 925        | 155 | 182 | 223    |
| CHFM4 - 619□DB - (B) - Ratio  | 3.0   | 4   | 885      | 166 | 222 | 226    | 957        | 166 | 222 | 236    |
| CHFM5 - 619□DB - (B) - Ratio  | 3.7   | 4   | 885      | 166 | 222 | 226    | 957        | 166 | 222 | 236    |
| CHFM8 - 619□DB - (B) - Ratio  | 5.5   | 4   | 929      | 166 | 222 | 233    | 1001       | 166 | 222 | 243    |
| CHFM10 - 619□DB - (B) - Ratio | 7.5   | 4   | 952      | 211 | 251 | 248    | 1047       | 211 | 251 | 266    |
| CHFM15 - 619□DB - (B) - Ratio | 11    | 4   | 1012     | 211 | 251 | 262    | 1107       | 211 | 251 | 280    |
| CHFM20 - 619□DB - (B) - Ratio | 15    | 4   | 1102     | 261 | 324 | 314    | 1207       | 261 | 324 | 348    |

Note: 1. □ indicates motor capacity.

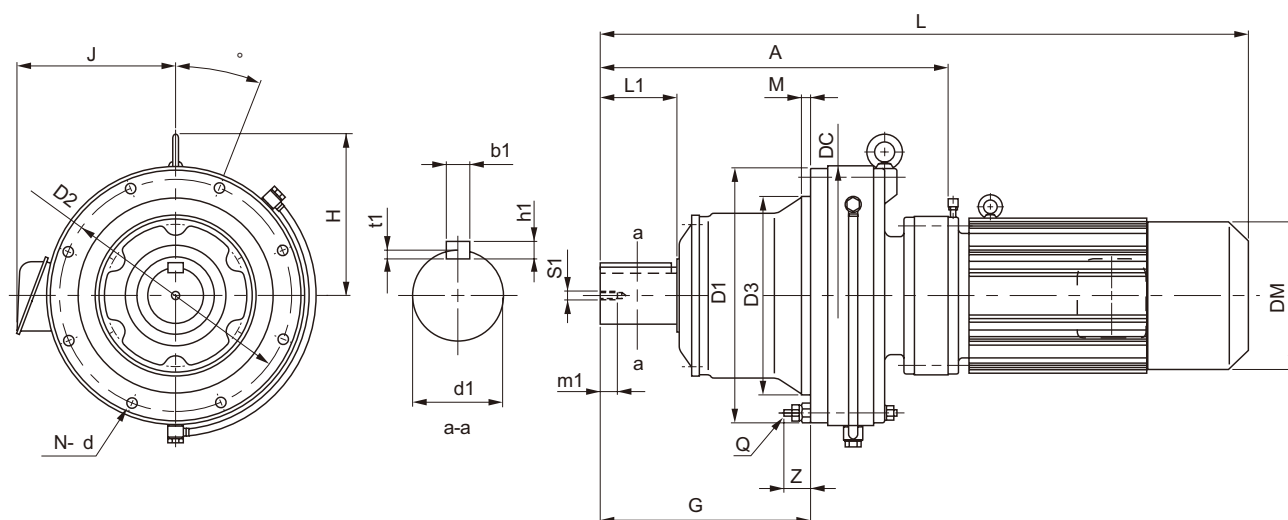
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter (φD3): Dimension tolerance conforms to JIS B 0401-1976 "g6."



## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 6205DA to 6215DA

GEARMOTORS

Dimension Tables  
CHFM

| Frame size | A   | G   | D1  | D2  | D3  | DC  | H   | Q   | Z  | M  | N  | d    | α° | Output Shaft |     |    |    |    |     |    | Note: 2, 3, 7 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|------|----|--------------|-----|----|----|----|-----|----|---------------|
|            |     |     |     |     |     |     |     |     |    |    |    |      |    | d1           | L1  | b1 | h1 | t1 | S1  | m1 |               |
| 6205DA     | 597 | 410 | 443 | 405 | 360 | 448 | 283 | M16 | 57 | 20 | 12 | 18   | 15 | 100          | 165 | 28 | 16 | 10 | M20 | 34 |               |
| 6205DB     | 624 | 410 | 443 | 405 | 360 | 448 | 283 | M16 | 57 | 20 | 12 | 18   | 15 | 100          | 165 | 28 | 16 | 10 | M20 | 34 |               |
| 6215DA     | 650 | 423 | 480 | 440 | 390 | 485 | 312 | M18 | 57 | 20 | 12 | 20.5 | 15 | 110          | 165 | 28 | 16 | 10 | M20 | 34 |               |

| Model                         | Note: 6 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CHFM1 - 6205DA - (B) - Ratio  |         | 0.75  | 4   | 834      | 143 | 160 | 225    | 877        | 143 | 160 | 228    |
| CHFM2 - 6205DA - (B) - Ratio  |         | 1.5   | 4   | 867      | 148 | 169 | 229    | 929        | 148 | 169 | 234    |
| CHFM3 - 6205DA - (B) - Ratio  |         | 2.2   | 4   | 887      | 155 | 182 | 233    | 949        | 155 | 182 | 240    |
| CHFM4 - 6205DA - (B) - Ratio  |         | 3.0   | 4   | 910      | 166 | 222 | 243    | 982        | 166 | 222 | 253    |
| CHFM5 - 6205DA - (B) - Ratio  |         | 3.7   | 4   | 910      | 166 | 222 | 243    | 982        | 166 | 222 | 253    |
| CHFM8 - 6205DA - (B) - Ratio  |         | 5.5   | 4   | 954      | 166 | 222 | 250    | 1026       | 166 | 222 | 260    |
| CHFM3 - 6205DB - (B) - Ratio  |         | 2.2   | 4   | 914      | 155 | 182 | 245    | 977        | 155 | 182 | 252    |
| CHFM4 - 6205DB - (B) - Ratio  |         | 3.0   | 4   | 937      | 166 | 222 | 255    | 1009       | 166 | 222 | 265    |
| CHFM5 - 6205DB - (B) - Ratio  |         | 3.7   | 4   | 937      | 166 | 222 | 255    | 1009       | 166 | 222 | 265    |
| CHFM8 - 6205DB - (B) - Ratio  |         | 5.5   | 4   | 981      | 166 | 222 | 262    | 1053       | 166 | 222 | 272    |
| CHFM10 - 6205DB - (B) - Ratio |         | 7.5   | 4   | 1004     | 211 | 251 | 277    | 1099       | 211 | 251 | 295    |
| CHFM15 - 6205DB - (B) - Ratio |         | 11    | 4   | 1064     | 211 | 251 | 290    | 1159       | 211 | 251 | 308    |
| CHFM20 - 6205DB - (B) - Ratio |         | 15    | 4   | 1154     | 261 | 324 | 342    | 1259       | 261 | 324 | 375    |
| CHFM2 - 6215DA - (B) - Ratio  |         | 1.5   | 4   | 920      | 148 | 169 | 321    | 982        | 148 | 169 | 326    |
| CHFM3 - 6215DA - (B) - Ratio  |         | 2.2   | 4   | 940      | 155 | 182 | 324    | 1003       | 155 | 182 | 331    |
| CHFM4 - 6215DA - (B) - Ratio  |         | 3.0   | 4   | 963      | 166 | 222 | 334    | 1035       | 166 | 222 | 344    |
| CHFM5 - 6215DA - (B) - Ratio  |         | 3.7   | 4   | 963      | 166 | 222 | 334    | 1035       | 166 | 222 | 344    |
| CHFM8 - 6215DA - (B) - Ratio  |         | 5.5   | 4   | 1007     | 166 | 222 | 341    | 1079       | 166 | 222 | 351    |
| CHFM10 - 6215DA - (B) - Ratio |         | 7.5   | 4   | 1030     | 211 | 251 | 356    | 1125       | 211 | 251 | 374    |
| CHFM15 - 6215DA - (B) - Ratio |         | 11    | 4   | 1090     | 211 | 251 | 369    | 1185       | 211 | 251 | 387    |
| CHFM20 - 6215DA - (B) - Ratio |         | 15    | 4   | 1180     | 261 | 324 | 421    | 1285       | 261 | 324 | 455    |

Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

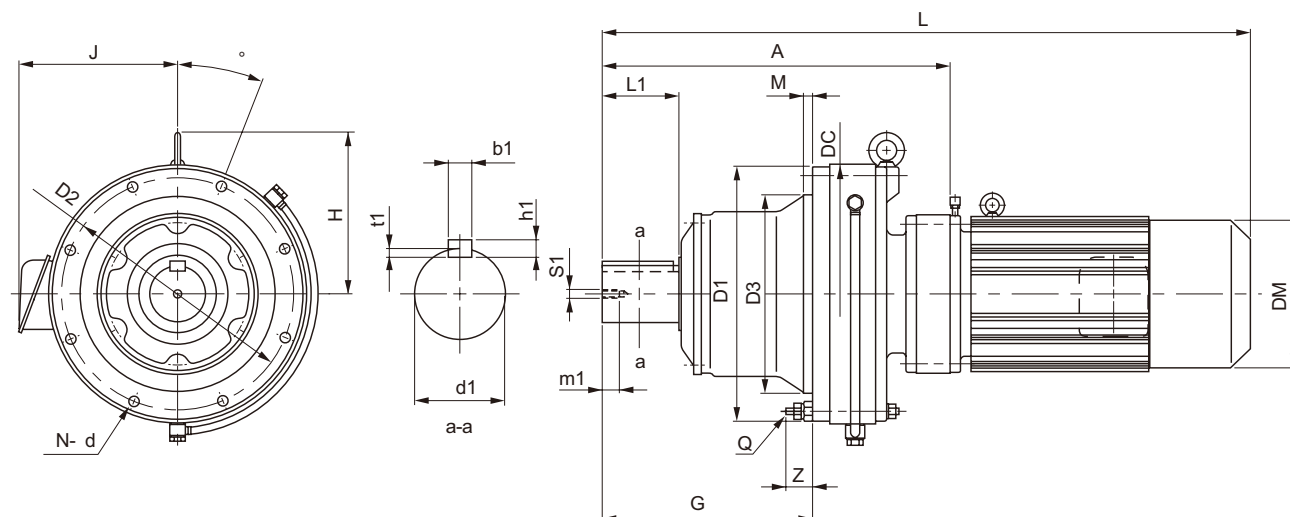
6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

## CHFM - 6215DB to 6225DB



| Frame size | A   | G   | D1  | D2  | D3  | DC  | H   | Q   | Z  | M  | N  | d    | α° | Output Shaft |     |    |    |    |     |    | Note: 2, 3, 6 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|------|----|--------------|-----|----|----|----|-----|----|---------------|
|            |     |     |     |     |     |     |     |     |    |    |    |      |    | d1           | L1  | b1 | h1 | t1 | S1  | m1 |               |
| 6215DB     | 675 | 423 | 480 | 440 | 390 | 485 | 312 | M18 | 57 | 20 | 12 | 20.5 | 15 | 110          | 165 | 28 | 16 | 10 | M20 | 34 |               |
| 6225DA     | 692 | 454 | 521 | 475 | 420 | 526 | 333 | M20 | 65 | 20 | 12 | 22   | 15 | 120          | 165 | 32 | 18 | 11 | M20 | 34 |               |
| 6225DB     | 735 | 454 | 521 | 475 | 420 | 526 | 333 | M20 | 65 | 20 | 12 | 22   | 15 | 120          | 165 | 32 | 18 | 11 | M20 | 34 |               |

| Model                         | Note: 5 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CHFM5 - 6215DB - (B) - Ratio  |         | 3.7   | 4   | 993      | 166 | 222 | 353    | 1065       | 166 | 222 | 363    |
| CHFM8 - 6215DB - (B) - Ratio  |         | 5.5   | 4   | 1037     | 166 | 222 | 360    | 1109       | 166 | 222 | 370    |
| CHFM10 - 6215DB - (B) - Ratio |         | 7.5   | 4   | 1060     | 211 | 251 | 376    | 1155       | 211 | 251 | 393    |
| CHFM15 - 6215DB - (B) - Ratio |         | 11    | 4   | 1120     | 211 | 251 | 390    | 1215       | 211 | 251 | 407    |
| CHFM20 - 6215DB - (B) - Ratio |         | 15    | 4   | 1205     | 261 | 324 | 443    | 1310       | 261 | 324 | 477    |
| CHFM25 - 6215DB - (B) - Ratio |         | 18.5  | 4   | 1300     | 340 | 394 | 518    | 1465       | 340 | 394 | 569    |
| CHFM30 - 6215DB - (B) - Ratio |         | 22    | 4   | 1300     | 340 | 394 | 518    | 1465       | 340 | 394 | 569    |
| CHFM2 - 6225DA - (B) - Ratio  |         | 1.5   | 4   | 962      | 148 | 169 | 378    | 1024       | 148 | 169 | 383    |
| CHFM3 - 6225DA - (B) - Ratio  |         | 2.2   | 4   | 982      | 155 | 182 | 381    | 1045       | 155 | 182 | 388    |
| CHFM4 - 6225DA - (B) - Ratio  |         | 3.0   | 4   | 1005     | 166 | 222 | 391    | 1077       | 166 | 222 | 401    |
| CHFM5 - 6225DA - (B) - Ratio  |         | 3.7   | 4   | 1005     | 166 | 222 | 391    | 1077       | 166 | 222 | 401    |
| CHFM8 - 6225DA - (B) - Ratio  |         | 5.5   | 4   | 1049     | 166 | 222 | 398    | 1121       | 166 | 222 | 408    |
| CHFM10 - 6225DA - (B) - Ratio |         | 7.5   | 4   | 1072     | 211 | 251 | 413    | 1167       | 211 | 251 | 431    |
| CHFM15 - 6225DA - (B) - Ratio |         | 11    | 4   | 1132     | 211 | 251 | 427    | 1227       | 211 | 251 | 445    |
| CHFM20 - 6225DA - (B) - Ratio |         | 15    | 4   | 1222     | 261 | 324 | 479    | 1327       | 261 | 324 | 512    |
| CHFM5 - 6225DB - (B) - Ratio  |         | 3.7   | 4   | 1058     | 166 | 222 | 436    | 1130       | 166 | 222 | 447    |
| CHFM8 - 6225DB - (B) - Ratio  |         | 5.5   | 4   | 1102     | 166 | 222 | 443    | 1174       | 166 | 222 | 454    |
| CHFM10 - 6225DB - (B) - Ratio |         | 7.5   | 4   | 1125     | 211 | 251 | 458    | 1220       | 211 | 251 | 476    |
| CHFM15 - 6225DB - (B) - Ratio |         | 11    | 4   | 1185     | 211 | 251 | 472    | 1280       | 211 | 251 | 490    |
| CHFM20 - 6225DB - (B) - Ratio |         | 15    | 4   | 1265     | 261 | 324 | 526    | 1370       | 261 | 324 | 560    |
| CHFM25 - 6225DB - (B) - Ratio |         | 18.5  | 4   | 1360     | 340 | 394 | 598    | 1525       | 340 | 394 | 649    |
| CHFM30 - 6225DB - (B) - Ratio |         | 22    | 4   | 1360     | 340 | 394 | 598    | 1525       | 340 | 394 | 649    |
| CHFM40 - 6225DB - (B) - Ratio |         | 30    | 4   | 1360     | 340 | 394 | 615    | 1525       | 340 | 394 | 666    |

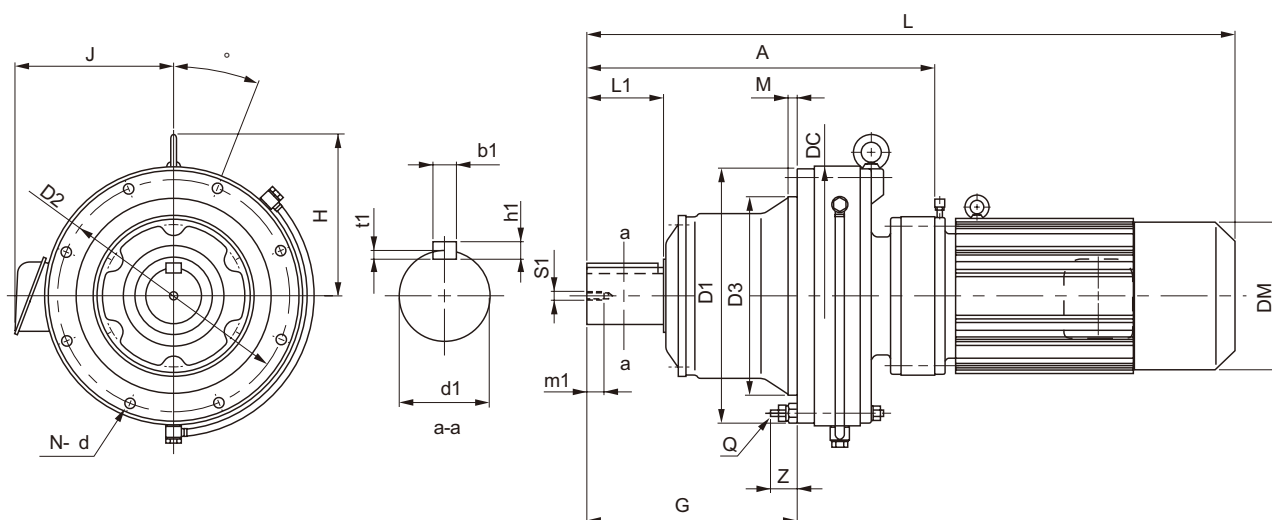
Note: 1. [ ] indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "g6."

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

CHFM<sup>Note: 1</sup> - 6235DA to 6245DB

| Frame size | A   | G   | D1  | D2  | D3  | DC  | H   | Q   | Z  | M  | N  | d  | α° | Output Shaft |     |    |    |    |     |    | Note: 2, 3, 6 |  |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|--------------|-----|----|----|----|-----|----|---------------|--|
|            |     |     |     |     |     |     |     |     |    |    |    |    |    | d1           | L1  | b1 | h1 | t1 | S1  | m1 |               |  |
| 6235DA     | 778 | 505 | 557 | 510 | 455 | 562 | 351 | M20 | 68 | 20 | 12 | 22 | 15 | 130          | 200 | 32 | 18 | 11 | M24 | 41 |               |  |
| 6235DB     | 800 | 505 | 557 | 510 | 455 | 562 | 351 | M20 | 68 | 20 | 12 | 22 | 15 | 130          | 200 | 32 | 18 | 11 | M24 | 41 |               |  |
| 6245DA     | 816 | 529 | 615 | 560 | 500 | 614 | 395 | M24 | 65 | 25 | 12 | 27 | 15 | 140          | 200 | 36 | 20 | 12 | M24 | 41 |               |  |
| 6245DB     | 837 | 529 | 615 | 560 | 500 | 614 | 395 | M24 | 65 | 25 | 12 | 27 | 15 | 140          | 200 | 36 | 20 | 12 | M24 | 41 |               |  |

| Model                         | Note: 5 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CHFM3 - 6235DA - (B) - Ratio  |         | 2.2   | 4   | 1068     | 155 | 182 | 485    | 1131       | 155 | 182 | 491    |
| CHFM4 - 6235DA - (B) - Ratio  |         | 3.0   | 4   | 1091     | 166 | 222 | 494    | 1163       | 166 | 222 | 504    |
| CHFM5 - 6235DA - (B) - Ratio  |         | 3.7   | 4   | 1091     | 166 | 222 | 494    | 1163       | 166 | 222 | 504    |
| CHFM8 - 6235DA - (B) - Ratio  |         | 5.5   | 4   | 1135     | 166 | 222 | 501    | 1207       | 166 | 222 | 511    |
| CHFM10 - 6235DA - (B) - Ratio |         | 7.5   | 4   | 1163     | 211 | 251 | 517    | 1258       | 211 | 251 | 534    |
| CHFM15 - 6235DA - (B) - Ratio |         | 11    | 4   | 1223     | 211 | 251 | 531    | 1318       | 211 | 251 | 548    |
| CHFM20 - 6235DA - (B) - Ratio |         | 15    | 4   | 1308     | 261 | 324 | 584    | 1413       | 261 | 324 | 618    |
| CHFM25 - 6235DA - (B) - Ratio |         | 18.5  | 4   | 1403     | 340 | 394 | 661    | 1568       | 340 | 394 | 712    |
| CHFM30 - 6235DA - (B) - Ratio |         | 22    | 4   | 1403     | 340 | 394 | 661    | 1568       | 340 | 394 | 712    |
| CHFM15 - 6235DB - (B) - Ratio |         | 11    | 4   | 1245     | 211 | 251 | 567    | 1340       | 211 | 251 | 585    |
| CHFM20 - 6235DB - (B) - Ratio |         | 15    | 4   | 1330     | 261 | 324 | 629    | 1435       | 261 | 324 | 735    |
| CHFM25 - 6235DB - (B) - Ratio |         | 18.5  | 4   | 1425     | 340 | 394 | 696    | 1590       | 340 | 394 | 747    |
| CHFM30 - 6235DB - (B) - Ratio |         | 22    | 4   | 1425     | 340 | 394 | 696    | 1590       | 340 | 394 | 747    |
| CHFM40 - 6235DB - (B) - Ratio |         | 30    | 4   | 1425     | 340 | 394 | 710    | 1590       | 340 | 394 | 753    |
| CHFM50 - 6235DB - (B) - Ratio |         | 37    | 4   | 1540     | 340 | 394 | 748    | 1755       | 340 | 394 | 845    |
| CHFM3 - 6245DA - (B) - Ratio  |         | 2.2   | 4   | 1106     | 155 | 182 | 593    | 1169       | 155 | 182 | 599    |
| CHFM4 - 6245DA - (B) - Ratio  |         | 3.0   | 4   | 1129     | 166 | 222 | 602    | 1201       | 166 | 222 | 612    |
| CHFM5 - 6245DA - (B) - Ratio  |         | 3.7   | 4   | 1129     | 166 | 222 | 602    | 1201       | 166 | 222 | 612    |
| CHFM8 - 6245DA - (B) - Ratio  |         | 5.5   | 4   | 1173     | 166 | 222 | 609    | 1245       | 166 | 222 | 619    |
| CHFM10 - 6245DA - (B) - Ratio |         | 7.5   | 4   | 1201     | 211 | 251 | 625    | 1296       | 211 | 251 | 642    |
| CHFM15 - 6245DA - (B) - Ratio |         | 11    | 4   | 1261     | 211 | 251 | 639    | 1356       | 211 | 251 | 656    |
| CHFM20 - 6245DA - (B) - Ratio |         | 15    | 4   | 1346     | 261 | 324 | 692    | 1451       | 261 | 324 | 726    |
| CHFM25 - 6245DA - (B) - Ratio |         | 18.5  | 4   | 1441     | 340 | 394 | 763    | 1606       | 340 | 394 | 814    |
| CHFM30 - 6245DA - (B) - Ratio |         | 22    | 4   | 1441     | 340 | 394 | 763    | 1606       | 340 | 394 | 814    |
| CHFM15 - 6245DB - (B) - Ratio |         | 11    | 4   | 1282     | 211 | 251 | 663    | 1377       | 211 | 251 | 681    |
| CHFM20 - 6245DB - (B) - Ratio |         | 15    | 4   | 1367     | 261 | 324 | 723    | 1472       | 261 | 324 | 752    |
| CHFM25 - 6245DB - (B) - Ratio |         | 18.5  | 4   | 1462     | 340 | 394 | 789    | 1627       | 340 | 394 | 840    |
| CHFM30 - 6245DB - (B) - Ratio |         | 22    | 4   | 1462     | 340 | 394 | 789    | 1627       | 340 | 394 | 840    |
| CHFM40 - 6245DB - (B) - Ratio |         | 30    | 4   | 1462     | 340 | 394 | 806    | 1627       | 340 | 394 | 849    |
| CHFM50 - 6245DB - (B) - Ratio |         | 37    | 4   | 1577     | 340 | 394 | 843    | 1792       | 340 | 394 | 940    |

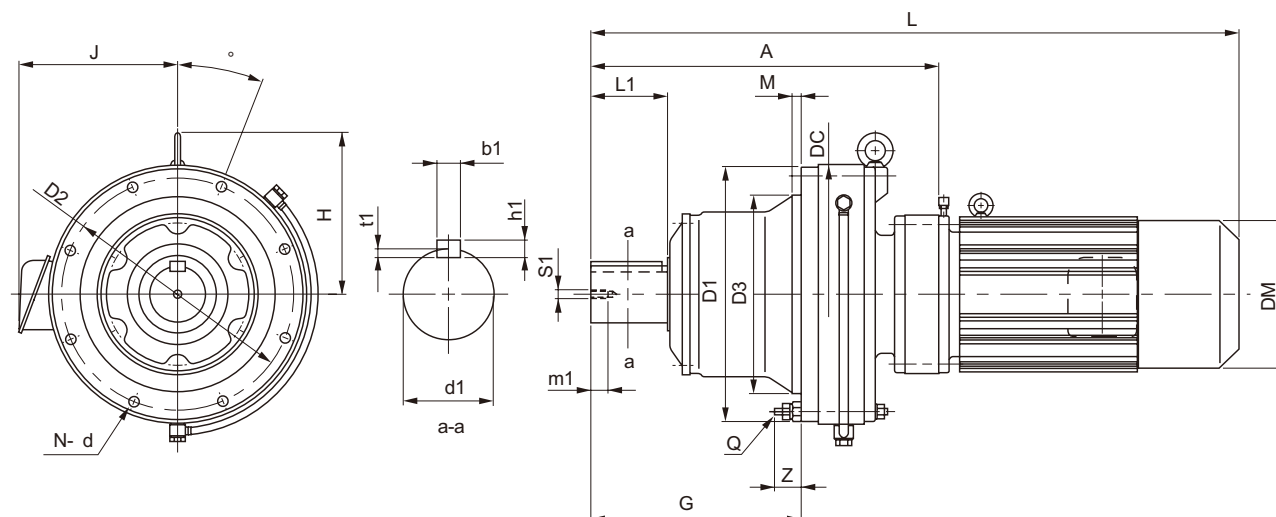
Note: 5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Horizontal Direction, Flange Mount)

## CHFM - 6255DA to 6265DA



| Frame size | A    | G   | D1  | D2  | D3  | DC  | H   | Q   | Z  | M  | N  | d  | $\alpha^\circ$ | Output Shaft |     |    |    |    |     | Note: 2, 3, 8 |
|------------|------|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----------------|--------------|-----|----|----|----|-----|---------------|
|            |      |     |     |     |     |     |     |     |    |    |    |    |                | d1           | L1  | b1 | h1 | t1 | S1  |               |
| 6255DA     | 956  | 616 | 666 | 610 | 540 | 670 | 386 | M24 | 88 | 30 | 12 | 27 | 15             | 160          | 240 | 40 | 22 | 13 | M30 | 49            |
| 6255DB     | 978  | 616 | 666 | 610 | 540 | 670 | 386 | M24 | 88 | 30 | 12 | 27 | 15             | 160          | 240 | 40 | 22 | 13 | M30 | 49            |
| 6265DA     | 1088 | 712 | 730 | 660 | 570 | 736 | 453 | M30 | 82 | 40 | 12 | 34 | 15             | 170          | 300 | 40 | 22 | 13 | M30 | 49            |

| Model                         | Note: 7 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CHFM5 - 6255DA - (B) - Ratio  |         | 3.7   | 4   | 1284     | 166 | 222 | 868    | 1356       | 166 | 222 | 878    |
| CHFM8 - 6255DA - (B) - Ratio  |         | 5.5   | 4   | 1328     | 166 | 222 | 878    | 1400       | 166 | 222 | 888    |
| CHFM10 - 6255DA - (B) - Ratio |         | 7.5   | 4   | 1346     | 211 | 251 | 893    | 1441       | 211 | 251 | 908    |
| CHFM15 - 6255DA - (B) - Ratio |         | 11    | 4   | 1406     | 211 | 251 | 908    | 1501       | 211 | 251 | 923    |
| CHFM20 - 6255DA - (B) - Ratio |         | 15    | 4   | 1486     | 261 | 324 | 958    | 1591       | 261 | 324 | 994    |
| CHFM25 - 6255DA - (B) - Ratio |         | 18.5  | 4   | 1581     | 340 | 394 | 1032   | 1746       | 340 | 394 | 1083   |
| CHFM30 - 6255DA - (B) - Ratio |         | 22    | 4   | 1581     | 340 | 394 | 1032   | 1746       | 340 | 394 | 1083   |
| CHFM40 - 6255DA - (B) - Ratio |         | 30    | 4   | 1581     | 340 | 394 | 1052   | 1746       | 340 | 394 | 1095   |
| CHFM15 - 6255DB - (B) - Ratio |         | 11    | 4   | 1443     | 211 | 251 | 981    | 1538       | 211 | 251 | 996    |
| CHFM20 - 6255DB - (B) - Ratio |         | 15    | 4   | 1508     | 261 | 324 | 1031   | 1613       | 261 | 324 | 1065   |
| CHFM25 - 6255DB - (B) - Ratio |         | 18.5  | 4   | 1603     | 340 | 394 | 1107   | 1768       | 340 | 394 | 1158   |
| CHFM30 - 6255DB - (B) - Ratio |         | 22    | 4   | 1603     | 340 | 394 | 1107   | 1768       | 340 | 394 | 1158   |
| CHFM40 - 6255DB - (B) - Ratio |         | 30    | 4   | 1603     | 340 | 394 | 1122   | 1768       | 340 | 394 | 1165   |
| CHFM50 - 6255DB - (B) - Ratio |         | 37    | 4   | 1718     | 340 | 394 | 1159   | 1928       | 340 | 394 | 1256   |
| CHFM60 - 6255DB - (B) - Ratio |         | 45    | 4   | 1718     | 340 | 394 | 1159   | 1928       | 340 | 394 | 1256   |
| CHFM8 - 6265DA - (B) - Ratio  |         | 5.5   | 4   | 1480     | 166 | 222 | 1196   | 1552       | 166 | 222 | 1206   |
| CHFM10 - 6265DA - (B) - Ratio |         | 7.5   | 4   | 1493     | 211 | 251 | 1211   | 1588       | 211 | 251 | 1231   |
| CHFM15 - 6265DA - (B) - Ratio |         | 11    | 4   | 1553     | 211 | 251 | 1226   | 1648       | 211 | 251 | 1241   |
| CHFM20 - 6265DA - (B) - Ratio |         | 15    | 4   | 1618     | 261 | 324 | 1276   | 1723       | 261 | 324 | 1311   |
| CHFM25 - 6265DA - (B) - Ratio |         | 18.5  | 4   | 1713     | 340 | 394 | 1355   | 1878       | 340 | 394 | 1400   |
| CHFM30 - 6265DA - (B) - Ratio |         | 22    | 4   | 1713     | 340 | 394 | 1355   | 1878       | 340 | 394 | 1400   |
| CHFM40 - 6265DA - (B) - Ratio |         | 30    | 4   | 1713     | 340 | 394 | 1370   | 1878       | 340 | 394 | 1413   |
| CHFM50 - 6265DA - (B) - Ratio |         | 37    | 4   | 1828     | 340 | 394 | 1405   | 2043       | 340 | 394 | 1502   |
| CHFM60 - 6265DA - (B) - Ratio |         | 45    | 4   | 1828     | 340 | 394 | 1405   | 2043       | 340 | 394 | 1502   |

Note: 1. [ ] indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

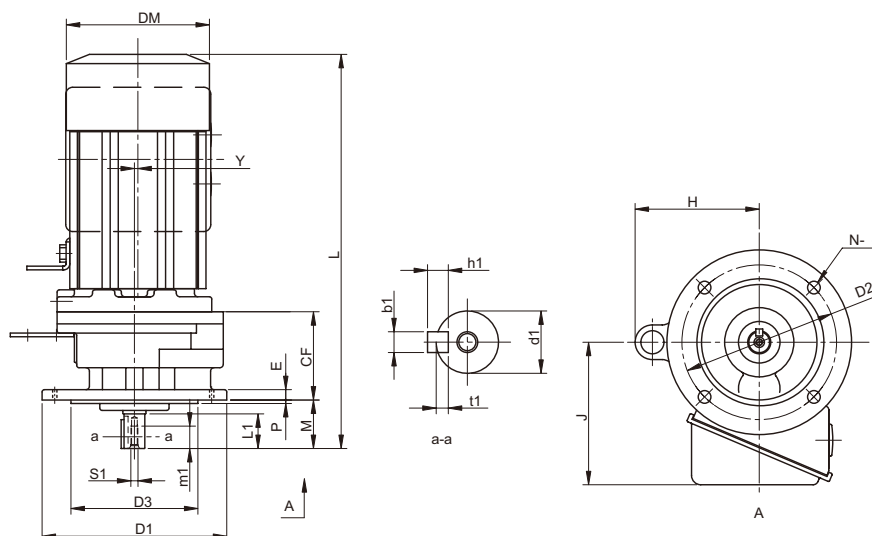
3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ) of CHFM type: Dimension tolerance conforms to JIS B 0401-1976 "g6."

5. Pilot diameter ( $\phi D3$ ) of CVVM type: Dimension tolerance conforms to JIS B 0401-1976 "f8."

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 607□SK to 609□SK



GEARMOTORS

Dimension Tables  
CVVM

| Frame size<br><small>Note: 6</small> | CF  | D1  | D2  | D3  | M  | E | P | Y | N | d  | H   | Output Shaft <small>Note: 2, 3, 8</small> |    |    |    |     |    |    |
|--------------------------------------|-----|-----|-----|-----|----|---|---|---|---|----|-----|-------------------------------------------|----|----|----|-----|----|----|
|                                      |     |     |     |     |    |   |   |   |   |    |     | d1                                        | L1 | b1 | h1 | t1  | S1 | m1 |
| 607□SK                               | 77  | 160 | 134 | 110 | 42 | 9 | 3 | 0 | 4 | 11 | -   | 18                                        | 30 | 6  | 6  | 3.5 | M6 | 16 |
| 608□SK                               | 92  | 160 | 134 | 110 | 48 | 9 | 3 | 0 | 4 | 11 | -   | 22                                        | 35 | 6  | 6  | 3.5 | M6 | 16 |
| 609□SK                               | 118 | 160 | 134 | 110 | 48 | 9 | 3 | 0 | 4 | 11 | 107 | 28                                        | 35 | 8  | 7  | 4   | M8 | 20 |

| Model<br><small>Note: 6, 7</small> | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                                    | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM05 - 607□SK - (B) - Ratio      | 0.4   | 4   | 310      | 113 | 124 | 12     | 342        | 113 | 124 | 13     |
| CVVM08 - 607□SK - (B) - Ratio      | 0.55  | 4   | 350      | 143 | 160 | 15     | 394        | 143 | 160 | 17     |
| CVVM1 - 607□SK - (B) - Ratio       | 0.75  | 4   | 350      | 143 | 160 | 15     | 394        | 143 | 160 | 17     |
| CVVM05 - 608□SK - (B) - Ratio      | 0.4   | 4   | 336      | 113 | 124 | 13     | 368        | 113 | 124 | 14     |
| CVVM08 - 608□SK - (B) - Ratio      | 0.55  | 4   | 377      | 143 | 160 | 16     | 420        | 143 | 160 | 18     |
| CVVM1 - 608□SK - (B) - Ratio       | 0.75  | 4   | 377      | 143 | 160 | 16     | 420        | 143 | 160 | 18     |
| CVVM1H - 608□SK - (B) - Ratio      | 1.1   | 4   | 410      | 148 | 169 | 21     | 472        | 148 | 169 | 25     |
| CVVM2 - 608□SK - (B) - Ratio       | 1.5   | 4   | 410      | 148 | 169 | 21     | 472        | 148 | 169 | 25     |
| CVVM05 - 609□SK - (B) - Ratio      | 0.4   | 4   | 362      | 113 | 124 | 15     | 394        | 113 | 124 | 16     |
| CVVM08 - 609□SK - (B) - Ratio      | 0.55  | 4   | 403      | 143 | 160 | 18     | 446        | 143 | 160 | 20     |
| CVVM1 - 609□SK - (B) - Ratio       | 0.75  | 4   | 403      | 143 | 160 | 18     | 446        | 143 | 160 | 20     |
| CVVM1H - 609□SK - (B) - Ratio      | 1.1   | 4   | 436      | 148 | 169 | 23     | 498        | 148 | 169 | 27     |
| CVVM2 - 609□SK - (B) - Ratio       | 1.5   | 4   | 436      | 148 | 169 | 23     | 498        | 148 | 169 | 27     |
| CVVM3 - 609□SK - (B) - Ratio       | 2.2   | 4   | 456      | 155 | 182 | 27     | 519        | 155 | 182 | 33     |

Note: 6. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

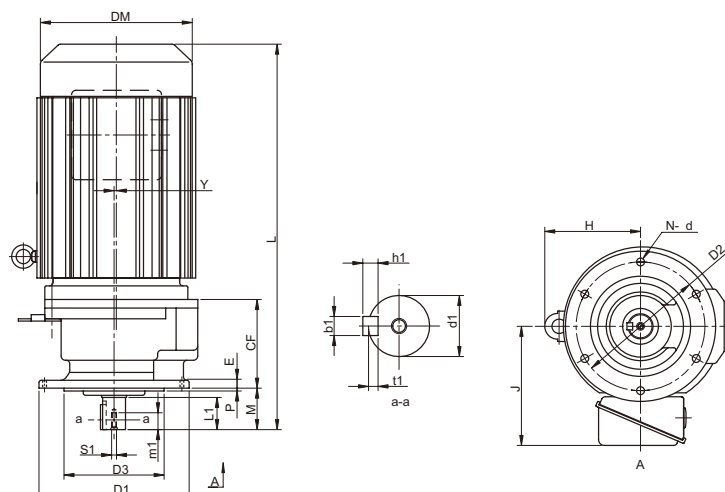
7. "B" after the frame size indicates models equipped with brake.

8. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

9. Dimensions in above drawings are subject to change without notice.

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 610□SK to 611□SK



| Frame size<br><div>Note: 5</div> | CF  | D1  | D2  | D3  | M  | E  | P | Y | N | d  | H   | Output Shaft <div>Note: 2, 3, 7</div> |    |    |    |    |    |    |
|----------------------------------|-----|-----|-----|-----|----|----|---|---|---|----|-----|---------------------------------------|----|----|----|----|----|----|
|                                  |     |     |     |     |    |    |   |   |   |    |     | d1                                    | L1 | b1 | h1 | t1 | S1 | m1 |
| 610□SK                           | 122 | 160 | 134 | 110 | 48 | 9  | 3 | 0 | 4 | 11 | 116 | 28                                    | 35 | 8  | 7  | 4  | M8 | 20 |
| 611□SK                           | 124 | 210 | 180 | 140 | 58 | 11 | 4 | 3 | 6 | 11 | 134 | 32                                    | 45 | 10 | 8  | 5  | M8 | 20 |

| Model<br>Note: 5, 6           | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM05 - 610□SK - (B) - Ratio | 0.4   | 4   | 362      | 113 | 124 | 16     | 393        | 113 | 124 | 17     |
| CVVM08 - 610□SK - (B) - Ratio | 0.55  | 4   | 403      | 143 | 160 | 19     | 452        | 143 | 160 | 21     |
| CVVM1 - 610□SK - (B) - Ratio  | 0.75  | 4   | 403      | 143 | 160 | 19     | 452        | 143 | 160 | 21     |
| CVVM1H - 610□SK - (B) - Ratio | 1.1   | 4   | 436      | 148 | 169 | 24     | 493        | 148 | 169 | 28     |
| CVVM2 - 610□SK - (B) - Ratio  | 1.5   | 4   | 436      | 148 | 169 | 24     | 493        | 148 | 169 | 28     |
| CVVM3 - 610□SK - (B) - Ratio  | 2.2   | 4   | 456      | 155 | 182 | 28     | 519        | 155 | 182 | 34     |
| CVVM4 - 610□SK - (B) - Ratio  | 3     | 4   | 491      | 166 | 222 | 40     | 563        | 166 | 222 | 51     |
| CVVM5 - 610□SK - (B) - Ratio  | 3.7   | 4   | 491      | 166 | 222 | 40     | 563        | 166 | 222 | 51     |
| CVVM08 - 611□SK - (B) - Ratio | 0.55  | 4   | 419      | 143 | 160 | 29     | 462        | 143 | 160 | 31     |
| CVVM1 - 611□SK - (B) - Ratio  | 0.75  | 4   | 419      | 143 | 160 | 29     | 462        | 143 | 160 | 31     |
| CVVM1H - 611□SK - (B) - Ratio | 1.1   | 4   | 452      | 148 | 169 | 34     | 514        | 148 | 169 | 38     |
| CVVM2 - 611□SK - (B) - Ratio  | 1.5   | 4   | 452      | 148 | 169 | 34     | 514        | 148 | 169 | 38     |
| CVVM3 - 611□SK - (B) - Ratio  | 2.2   | 4   | 472      | 155 | 182 | 38     | 535        | 155 | 182 | 44     |
| CVVM4 - 611□SK - (B) - Ratio  | 3     | 4   | 495      | 166 | 222 | 50     | 567        | 166 | 222 | 61     |
| CVVM5 - 611□SK - (B) - Ratio  | 3.7   | 4   | 495      | 166 | 222 | 50     | 567        | 166 | 222 | 61     |
| CVVM8 - 611□SK - (B) - Ratio  | 5.5   | 4   | 539      | 166 | 222 | 58     | 611        | 166 | 222 | 69     |

Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

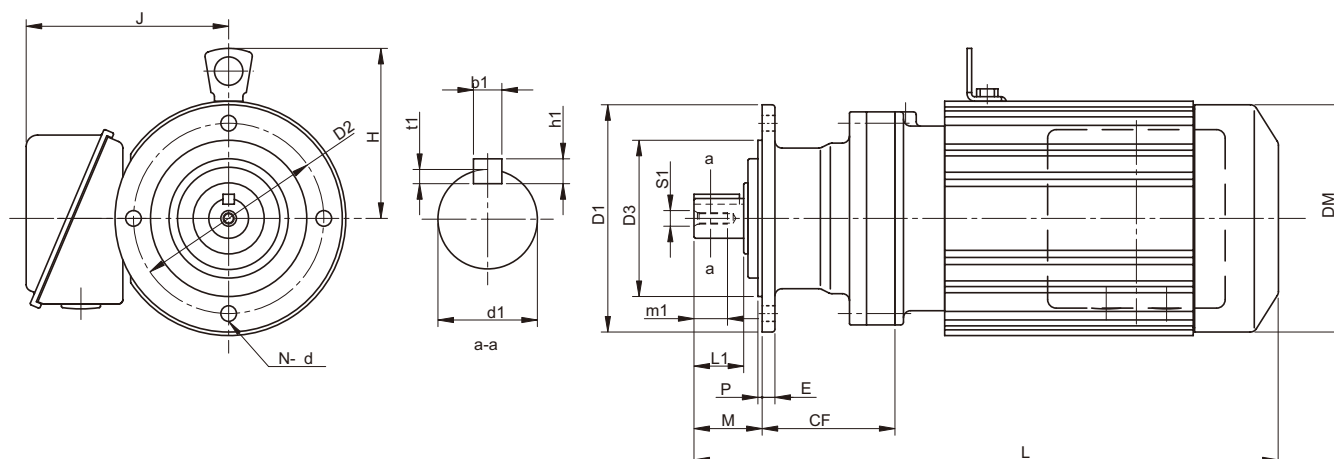
3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter (φD3): Dimension tolerance conforms to JIS B 0401-1976 "f8."



# Dimension Tables Gearmotors (Universal Direction, V-Flange Mount)

CNVM<sup>Note: 1</sup> - 606□ to 609□



GEARMOTORS

Dimension Tables  
CNVM

| Frame size<br><small>Note: 5</small> | CF | D1  | D2  | D3  | M  | E | P | N | d  | H   | Output Shaft<br><small>Note: 2, 3, 7</small> |    |    |    |     |    |    |  |
|--------------------------------------|----|-----|-----|-----|----|---|---|---|----|-----|----------------------------------------------|----|----|----|-----|----|----|--|
|                                      |    |     |     |     |    |   |   |   |    |     | d1                                           | L1 | b1 | h1 | t1  | S1 | m1 |  |
| 606□                                 | 58 | 120 | 102 | 80  | 34 | 8 | 3 | 6 | 9  | -   | 14                                           | 25 | 5  | 5  | 3   | M5 | 16 |  |
| 607□                                 | 56 | 160 | 134 | 110 | 42 | 9 | 3 | 4 | 11 | -   | 18                                           | 30 | 6  | 6  | 3.5 | M6 | 16 |  |
| 608□                                 | 81 | 160 | 134 | 110 | 48 | 9 | 3 | 4 | 11 | -   | 22                                           | 35 | 6  | 6  | 3.5 | M6 | 16 |  |
| 609□                                 | 94 | 160 | 134 | 110 | 48 | 9 | 3 | 4 | 11 | 107 | 28                                           | 35 | 8  | 7  | 4   | M8 | 20 |  |

| Model<br><small>Note: 5, 6</small> | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                                    | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CNVM01 - 606□ - (B) - Ratio        | 0.1   | 4   | 254      | 113 | 119 | 7      | 261        | 113 | 124 | 9      |
| CNVM02 - 606□ - (B) - Ratio        | 0.2   | 4   | 272      | 113 | 124 | 8      | 300        | 113 | 124 | 10     |
| CNVM03 - 606□ - (B) - Ratio        | 0.25  | 4   | 272      | 113 | 124 | 9      | 300        | 113 | 124 | 10     |
| CNVM01 - 607□ - (B) - Ratio        | 0.1   | 4   | 260      | 113 | 119 | 9      | 267        | 113 | 124 | 10     |
| CNVM02 - 607□ - (B) - Ratio        | 0.2   | 4   | 278      | 113 | 124 | 10     | 306        | 113 | 124 | 11     |
| CNVM03 - 607□ - (B) - Ratio        | 0.25  | 4   | 278      | 113 | 124 | 10     | 306        | 113 | 124 | 11     |
| CNVM05 - 607□ - (B) - Ratio        | 0.4   | 4   | 294      | 113 | 124 | 11     | 326        | 113 | 124 | 12     |
| CNVM01 - 608□ - (B) - Ratio        | 0.1   | 4   | 286      | 113 | 119 | 12     | 293        | 113 | 124 | 13     |
| CNVM02 - 608□ - (B) - Ratio        | 0.2   | 4   | 304      | 113 | 124 | 13     | 332        | 113 | 124 | 14     |
| CNVM03 - 608□ - (B) - Ratio        | 0.25  | 4   | 304      | 113 | 124 | 13     | 332        | 113 | 124 | 14     |
| CNVM05 - 608□ - (B) - Ratio        | 0.4   | 4   | 320      | 113 | 124 | 15     | 352        | 113 | 124 | 16     |
| CNVM08 - 608□ - (B) - Ratio        | 0.55  | 4   | 361      | 143 | 160 | 19     | 404        | 143 | 160 | 20     |
| CNVM1 - 608□ - (B) - Ratio         | 0.75  | 4   | 361      | 143 | 160 | 19     | 404        | 143 | 160 | 20     |
| CNVM01 - 609□ - (B) - Ratio        | 0.1   | 4   | 304      | 113 | 119 | 13     | 311        | 113 | 124 | 15     |
| CNVM02 - 609□ - (B) - Ratio        | 0.2   | 4   | 322      | 113 | 124 | 14     | 350        | 113 | 124 | 16     |
| CNVM03 - 609□ - (B) - Ratio        | 0.25  | 4   | 322      | 113 | 124 | 14     | 350        | 113 | 124 | 16     |
| CNVM05 - 609□ - (B) - Ratio        | 0.4   | 4   | 338      | 113 | 124 | 15     | 370        | 113 | 124 | 17     |
| CNVM08 - 609□ - (B) - Ratio        | 0.55  | 4   | 379      | 143 | 160 | 19     | 422        | 143 | 160 | 22     |
| CNVM1 - 609□ - (B) - Ratio         | 0.75  | 4   | 379      | 143 | 160 | 19     | 422        | 143 | 160 | 22     |
| CNVM1H - 609□ - (B) - Ratio        | 1.1   | 4   | 412      | 148 | 169 | 22     | 474        | 148 | 169 | 27     |
| CNVM2 - 609□ - (B) - Ratio         | 1.5   | 4   | 412      | 148 | 169 | 22     | 474        | 148 | 169 | 27     |

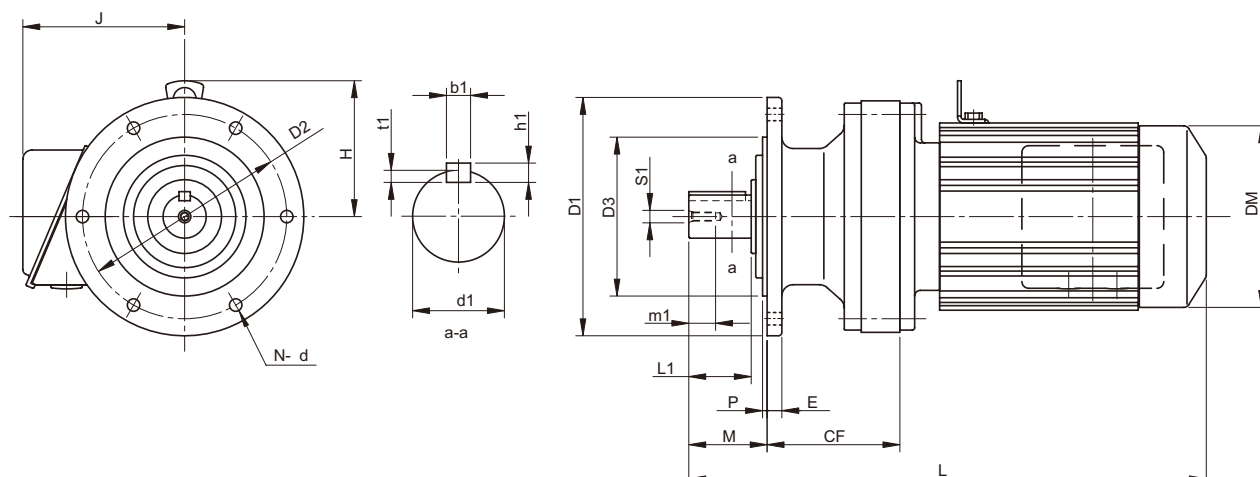
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Universal Direction, V-Flange Mount)

CNVM<sup>Note: 1</sup> - 610□ to 612□

| Frame size<br>Note: 5 | CF  | D1  | D2  | D3  | M  | E  | P | N | d  | H   | Output Shaft<br>Note: 2, 3, 7 |    |    |    |    |    |    |
|-----------------------|-----|-----|-----|-----|----|----|---|---|----|-----|-------------------------------|----|----|----|----|----|----|
|                       |     |     |     |     |    |    |   |   |    |     | d1                            | L1 | b1 | h1 | t1 | S1 | m1 |
| 610□                  | 108 | 160 | 134 | 110 | 48 | 9  | 3 | 4 | 11 | 107 | 28                            | 35 | 8  | 7  | 4  | M8 | 20 |
| 611□                  | 112 | 210 | 180 | 140 | 58 | 11 | 4 | 6 | 11 | 116 | 32                            | 45 | 10 | 8  | 5  | M8 | 20 |
| 612□                  | 117 | 210 | 180 | 140 | 69 | 13 | 4 | 6 | 11 | 137 | 38                            | 55 | 10 | 8  | 5  | M8 | 20 |

| Model<br>Note: 5, 6         | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-----------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                             | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CNVM02 - 610□ - (B) - Ratio | 0.2   | 4   | 336      | 113 | 124 | 16     | 364        | 113 | 124 | 18     |
| CNVM03 - 610□ - (B) - Ratio | 0.25  | 4   | 336      | 113 | 124 | 16     | 364        | 113 | 124 | 18     |
| CNVM05 - 610□ - (B) - Ratio | 0.4   | 4   | 352      | 113 | 124 | 17     | 384        | 113 | 124 | 19     |
| CNVM08 - 610□ - (B) - Ratio | 0.55  | 4   | 393      | 143 | 160 | 21     | 436        | 143 | 160 | 24     |
| CNVM1 - 610□ - (B) - Ratio  | 0.75  | 4   | 393      | 143 | 160 | 21     | 436        | 143 | 160 | 24     |
| CNVM1H - 610□ - (B) - Ratio | 1.1   | 4   | 426      | 148 | 169 | 25     | 488        | 148 | 169 | 30     |
| CNVM2 - 610□ - (B) - Ratio  | 1.5   | 4   | 426      | 148 | 169 | 25     | 488        | 148 | 169 | 30     |
| CNVM3 - 610□ - (B) - Ratio  | 2.2   | 4   | 446      | 155 | 182 | 29     | 509        | 155 | 182 | 35     |
| CNVM05 - 611□ - (B) - Ratio | 0.4   | 4   | 363      | 113 | 124 | 19     | 394        | 113 | 124 | 21     |
| CNVM08 - 611□ - (B) - Ratio | 0.55  | 4   | 403      | 143 | 160 | 22     | 452        | 143 | 160 | 25     |
| CNVM1 - 611□ - (B) - Ratio  | 0.75  | 4   | 403      | 143 | 160 | 22     | 452        | 143 | 160 | 25     |
| CNVM1H - 611□ - (B) - Ratio | 1.1   | 4   | 436      | 148 | 169 | 25     | 493        | 148 | 169 | 30     |
| CNVM2 - 611□ - (B) - Ratio  | 1.5   | 4   | 436      | 148 | 169 | 25     | 493        | 148 | 169 | 30     |
| CNVM3 - 611□ - (B) - Ratio  | 2.2   | 4   | 456      | 155 | 182 | 29     | 519        | 155 | 182 | 35     |
| CNVM4 - 611□ - (B) - Ratio  | 3.0   | 4   | 491      | 166 | 222 | 39     | 563        | 166 | 222 | 49     |
| CNVM5 - 611□ - (B) - Ratio  | 3.7   | 4   | 491      | 166 | 222 | 39     | 563        | 166 | 222 | 49     |
| CNVM05 - 612□ - (B) - Ratio | 0.4   | 4   | 387      | 113 | 124 | 30     | 419        | 113 | 124 | 31     |
| CNVM08 - 612□ - (B) - Ratio | 0.55  | 4   | 423      | 143 | 160 | 31     | 466        | 143 | 160 | 34     |
| CNVM1 - 612□ - (B) - Ratio  | 0.75  | 4   | 423      | 143 | 160 | 31     | 466        | 143 | 160 | 34     |
| CNVM1H - 612□ - (B) - Ratio | 1.1   | 4   | 456      | 148 | 169 | 35     | 518        | 148 | 169 | 40     |
| CNVM2 - 612□ - (B) - Ratio  | 1.5   | 4   | 456      | 148 | 169 | 35     | 518        | 148 | 169 | 40     |
| CNVM3 - 612□ - (B) - Ratio  | 2.2   | 4   | 476      | 155 | 182 | 39     | 539        | 155 | 182 | 46     |
| CNVM4 - 612□ - (B) - Ratio  | 3.0   | 4   | 499      | 166 | 222 | 49     | 571        | 166 | 222 | 59     |
| CNVM5 - 612□ - (B) - Ratio  | 3.7   | 4   | 499      | 166 | 222 | 49     | 571        | 166 | 222 | 59     |
| CNVM8 - 612□ - (B) - Ratio  | 5.5   | 4   | 543      | 166 | 222 | 56     | 615        | 166 | 222 | 66     |

Note: 1. □ indicates motor capacity.

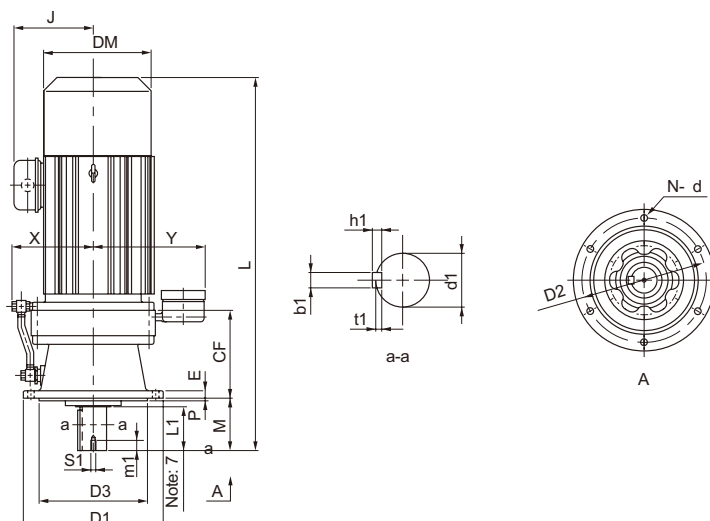
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "f8."

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 613□ to 614□



GEARMOTORS

Dimension Tables  
CVVM

| Frame size<br>Note: 5 | CF  | D1  | D2  | D3  | M  | E  | P | N | d  | X   | Y   | Output Shaft<br>Note: 2, 3, 7 |    |    |    |     |     |    |
|-----------------------|-----|-----|-----|-----|----|----|---|---|----|-----|-----|-------------------------------|----|----|----|-----|-----|----|
|                       |     |     |     |     |    |    |   |   |    |     |     | d1                            | L1 | b1 | h1 | t1  | S1  | m1 |
| 613□                  | 164 | 260 | 230 | 200 | 76 | 15 | 4 | 6 | 11 | 152 | 233 | 50                            | 61 | 14 | 9  | 5.5 | M10 | 18 |
| 614□                  | 164 | 260 | 230 | 200 | 96 | 15 | 4 | 6 | 11 | 152 | 233 | 50                            | 81 | 14 | 9  | 5.5 | M10 | 18 |

| Model<br>Note: 5, 6         | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-----------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                             | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM08 - 613□ - (B) - Ratio | 0.55  | 4   | 477      | 143 | 160 | 51     | 520        | 143 | 160 | 54     |
| CVVM1 - 613□ - (B) - Ratio  | 0.75  | 4   | 477      | 143 | 160 | 51     | 520        | 143 | 160 | 54     |
| CVVM1H - 613□ - (B) - Ratio | 1.1   | 4   | 510      | 148 | 169 | 55     | 572        | 148 | 169 | 60     |
| CVVM2 - 613□ - (B) - Ratio  | 1.5   | 4   | 510      | 148 | 169 | 55     | 572        | 148 | 169 | 60     |
| CVVM3 - 613□ - (B) - Ratio  | 2.2   | 4   | 530      | 155 | 182 | 58     | 593        | 155 | 182 | 65     |
| CVVM4 - 613□ - (B) - Ratio  | 3.0   | 4   | 553      | 166 | 222 | 68     | 625        | 166 | 222 | 78     |
| CVVM5 - 613□ - (B) - Ratio  | 3.7   | 4   | 553      | 166 | 222 | 68     | 625        | 166 | 222 | 78     |
| CVVM8 - 613□ - (B) - Ratio  | 5.5   | 4   | 597      | 166 | 222 | 75     | 669        | 166 | 222 | 85     |
| CVVM10 - 613□ - (B) - Ratio | 7.5   | 4   | 620      | 211 | 251 | 90     | 715        | 211 | 251 | 108    |
| CVVM15 - 613□ - (B) - Ratio | 11    | 4   | 680      | 211 | 251 | 104    | 775        | 211 | 251 | 121    |
| CVVM1 - 614□ - (B) - Ratio  | 0.75  | 4   | 497      | 143 | 160 | 52     | 540        | 143 | 160 | 55     |
| CVVM1H - 614□ - (B) - Ratio | 1.1   | 4   | 530      | 148 | 169 | 56     | 592        | 148 | 169 | 61     |
| CVVM2 - 614□ - (B) - Ratio  | 1.5   | 4   | 530      | 148 | 169 | 56     | 592        | 148 | 169 | 61     |
| CVVM3 - 614□ - (B) - Ratio  | 2.2   | 4   | 550      | 155 | 182 | 59     | 613        | 155 | 182 | 66     |
| CVVM4 - 614□ - (B) - Ratio  | 3.0   | 4   | 573      | 166 | 222 | 69     | 645        | 166 | 222 | 79     |
| CVVM5 - 614□ - (B) - Ratio  | 3.7   | 4   | 573      | 166 | 222 | 69     | 645        | 166 | 222 | 79     |
| CVVM8 - 614□ - (B) - Ratio  | 5.5   | 4   | 617      | 166 | 222 | 76     | 689        | 166 | 222 | 86     |
| CVVM10 - 614□ - (B) - Ratio | 7.5   | 4   | 640      | 211 | 251 | 91     | 735        | 211 | 251 | 109    |
| CVVM15 - 614□ - (B) - Ratio | 11    | 4   | 700      | 211 | 251 | 104    | 795        | 211 | 251 | 122    |
| CVVM20 - 614□ - (B) - Ratio | 15    | 4   | 790      | 261 | 324 | 156    | 895        | 261 | 324 | 190    |

Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

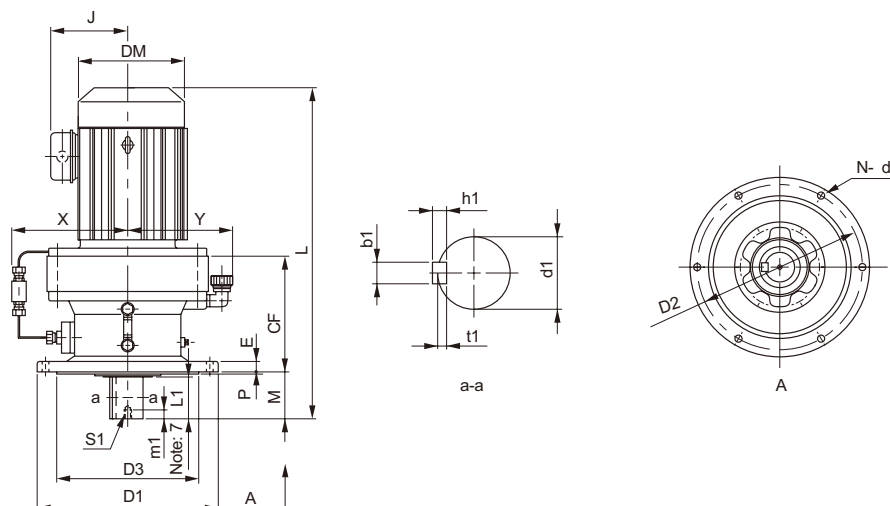
7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM   - 616  to 617 

Note: 1



| Frame size<br>Note: 5                                                | CF  | D1  | D2  | D3  | M  | E  | P | N | d  | X   | Y   | Output Shaft<br>Note: 2, 3, 7 |    |    |    |     |        |
|----------------------------------------------------------------------|-----|-----|-----|-----|----|----|---|---|----|-----|-----|-------------------------------|----|----|----|-----|--------|
|                                                                      |     |     |     |     |    |    |   |   |    |     |     | d1                            | L1 | b1 | h1 | t1  | S1 m1  |
| 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> | 219 | 340 | 310 | 270 | 89 | 20 | 4 | 6 | 11 | 217 | 200 | 60                            | 80 | 18 | 11 | 7   | M10 18 |
| 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> | 258 | 400 | 360 | 316 | 94 | 22 | 5 | 8 | 14 | 222 | 225 | 70                            | 84 | 20 | 12 | 7.5 | M12 24 |

| Model<br>Note: 5, 6                                                                         | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|---------------------------------------------------------------------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                                                                                             | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM1H - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 1.1   | 4   | 583      | 148 | 169 | 89     | 645        | 148 | 169 | 94     |
| CVVM2 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio  | 1.5   | 4   | 583      | 148 | 169 | 89     | 645        | 148 | 169 | 94     |
| CVVM3 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio  | 2.2   | 4   | 598      | 155 | 182 | 92     | 661        | 155 | 182 | 98     |
| CVVM4 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio  | 3.0   | 4   | 621      | 166 | 222 | 101    | 693        | 166 | 222 | 111    |
| CVVM5 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio  | 3.7   | 4   | 621      | 166 | 222 | 101    | 693        | 166 | 222 | 111    |
| CVVM8 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio  | 5.5   | 4   | 665      | 166 | 222 | 108    | 737        | 166 | 222 | 118    |
| CVVM10 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 7.5   | 4   | 693      | 211 | 251 | 124    | 788        | 211 | 251 | 141    |
| CVVM15 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 11    | 4   | 753      | 211 | 251 | 138    | 848        | 211 | 251 | 155    |
| CVVM20 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 15    | 4   | 838      | 261 | 324 | 191    | 943        | 261 | 324 | 225    |
| CVVM25 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 18.5  | 4   | 933      | 340 | 394 | 267    | 1098       | 340 | 394 | 318    |
| CVVM30 - 616 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 22    | 4   | 933      | 340 | 394 | 267    | 1098       | 340 | 394 | 318    |
| CVVM4 - 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio  | 3.0   | 4   | 680      | 166 | 222 | 144    | 752        | 166 | 222 | 154    |
| CVVM5 - 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio  | 3.7   | 4   | 680      | 166 | 222 | 144    | 752        | 166 | 222 | 154    |
| CVVM8 - 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio  | 5.5   | 4   | 724      | 166 | 222 | 151    | 796        | 166 | 222 | 161    |
| CVVM10 - 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 7.5   | 4   | 742      | 211 | 251 | 166    | 837        | 211 | 251 | 184    |
| CVVM15 - 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 11    | 4   | 802      | 211 | 251 | 180    | 897        | 211 | 251 | 198    |
| CVVM20 - 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 15    | 4   | 882      | 261 | 324 | 234    | 987        | 261 | 324 | 268    |
| CVVM25 - 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 18.5  | 4   | 977      | 340 | 394 | 306    | 1142       | 340 | 324 | 357    |
| CVVM30 - 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 22    | 4   | 977      | 340 | 394 | 306    | 1142       | 340 | 324 | 357    |
| CVVM40 - 617 <span style="border: 1px dashed black; padding: 0 2px;"> </span> - (B) - Ratio | 30    | 4   | 977      | 340 | 394 | 323    | 1142       | 340 | 324 | 366    |

Note: 1.   indicates motor capacity.

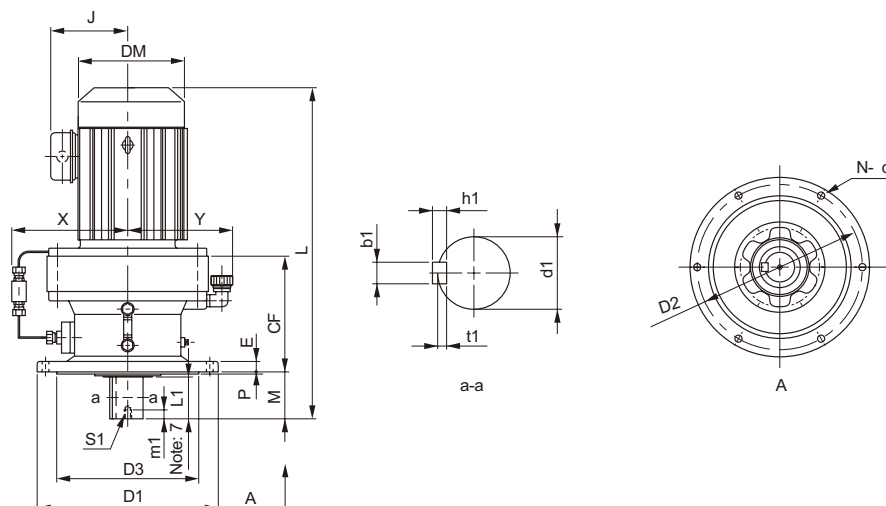
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "f8."

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 618□ to 619□



GEARMOTORS

Dimension Tables  
CVVM

| Frame size<br><small>Note: 5</small> | CF  | D1  | D2  | D3  | M   | E  | P | N  | d  | X   | Y   | Output Shaft<br><small>Note: 2, 3, 7</small> |     |    |    |    |        |
|--------------------------------------|-----|-----|-----|-----|-----|----|---|----|----|-----|-----|----------------------------------------------|-----|----|----|----|--------|
|                                      |     |     |     |     |     |    |   |    |    |     |     | d1                                           | L1  | b1 | h1 | t1 | S1 m1  |
| 618□                                 | 279 | 430 | 390 | 345 | 110 | 22 | 5 | 8  | 18 | 237 | 240 | 80                                           | 100 | 22 | 14 | 9  | M12 24 |
| 619□                                 | 320 | 490 | 450 | 400 | 145 | 30 | 6 | 12 | 18 | 265 | 270 | 95                                           | 125 | 25 | 14 | 9  | M20 34 |

| Model<br><small>Note: 5, 6</small> | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                                    | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM4 - 618□ - (B) - Ratio         | 3.0   | 4   | 717      | 166 | 222 | 170    | 789        | 166 | 222 | 180    |
| CVVM5 - 618□ - (B) - Ratio         | 3.7   | 4   | 717      | 166 | 222 | 170    | 789        | 166 | 222 | 180    |
| CVVM8 - 618□ - (B) - Ratio         | 5.5   | 4   | 761      | 166 | 222 | 178    | 833        | 166 | 222 | 188    |
| CVVM10 - 618□ - (B) - Ratio        | 7.5   | 4   | 779      | 211 | 251 | 193    | 874        | 211 | 251 | 211    |
| CVVM15 - 618□ - (B) - Ratio        | 11    | 4   | 839      | 211 | 251 | 207    | 934        | 211 | 251 | 225    |
| CVVM20 - 618□ - (B) - Ratio        | 15    | 4   | 919      | 261 | 324 | 267    | 1024       | 261 | 324 | 296    |
| CVVM25 - 618□ - (B) - Ratio        | 18.5  | 4   | 1014     | 340 | 394 | 333    | 1179       | 340 | 394 | 384    |
| CVVM30 - 618□ - (B) - Ratio        | 22    | 4   | 1014     | 340 | 394 | 333    | 1179       | 340 | 394 | 384    |
| CVVM40 - 618□ - (B) - Ratio        | 30    | 4   | 1014     | 340 | 394 | 350    | 1179       | 340 | 394 | 393    |
| CVVM50 - 618□ - (B) - Ratio        | 37    | 4   | 1129     | 340 | 394 | 398    | 1344       | 340 | 394 | 495    |
| CVVM60 - 618□ - (B) - Ratio        | 45    | 4   | 1129     | 340 | 394 | 398    | 1344       | 340 | 394 | 495    |
| CVVM8 - 619□ - (B) - Ratio         | 5.5   | 4   | 857      | 166 | 222 | 250    | 929        | 166 | 222 | 260    |
| CVVM10 - 619□ - (B) - Ratio        | 7.5   | 4   | 870      | 211 | 251 | 263    | 965        | 211 | 251 | 281    |
| CVVM15 - 619□ - (B) - Ratio        | 11    | 4   | 930      | 211 | 251 | 277    | 1025       | 211 | 251 | 295    |
| CVVM20 - 619□ - (B) - Ratio        | 15    | 4   | 995      | 261 | 324 | 330    | 1100       | 261 | 324 | 365    |
| CVVM25 - 619□ - (B) - Ratio        | 18.5  | 4   | 1090     | 340 | 394 | 408    | 1255       | 340 | 394 | 453    |
| CVVM256 - 619□ - (B) - Ratio       | 18.5  | 6   | 1090     | 340 | 394 | 421    | 1255       | 340 | 394 | 466    |
| CVVM30 - 619□ - (B) - Ratio        | 22    | 4   | 1090     | 340 | 394 | 408    | 1255       | 340 | 394 | 453    |
| CVVM40 - 619□ - (B) - Ratio        | 30    | 4   | 1090     | 340 | 394 | 421    | 1255       | 340 | 394 | 466    |
| CVVM406 - 619□ - (B) - Ratio       | 30    | 6   | 1205     | 340 | 394 | 459    | 1420       | 340 | 394 | 556    |
| CVVM50 - 619□ - (B) - Ratio        | 37    | 4   | 1205     | 340 | 394 | 459    | 1420       | 340 | 394 | 556    |
| CVVM506 - 619□ - (B) - Ratio       | 37    | 6   | 1205     | 340 | 394 | 459    | 1420       | 340 | 394 | 556    |
| CVVM60 - 619□ - (B) - Ratio        | 45    | 4   | 1205     | 340 | 394 | 459    | 1420       | 340 | 394 | 556    |

Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

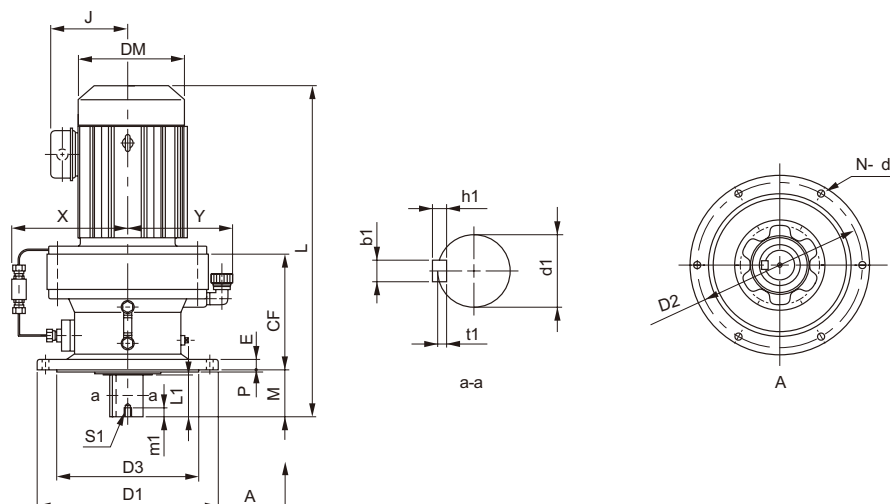
7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

## CVVM - 6205 to 6215

Note: 1



| Frame size | CF  | D1  | D2  | D3  | M   | E  | P | N | d  | X   | Y   | Output Shaft |     |    |    |    |     |    | Note: 2, 3, 6 |
|------------|-----|-----|-----|-----|-----|----|---|---|----|-----|-----|--------------|-----|----|----|----|-----|----|---------------|
|            |     |     |     |     |     |    |   |   |    |     |     | d1           | L1  | b1 | h1 | t1 | S1  | m1 |               |
| 6205       | 298 | 455 | 405 | 355 | 204 | 30 | 5 | 8 | 22 | 341 | 287 | 100          | 165 | 28 | 16 | 10 | M20 | 34 |               |
| 6215       | 323 | 490 | 440 | 390 | 203 | 35 | 7 | 8 | 24 | 348 | 306 | 110          | 165 | 28 | 16 | 10 | M20 | 34 |               |

| Model                        | Note: 5 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                              |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM15 - 6205 - (B) - Ratio  |         | 11    | 4   | 972      | 211 | 251 | 299    | 1067       | 211 | 251 | 317    |
| CVVM20 - 6205 - (B) - Ratio  |         | 15    | 4   | 1042     | 261 | 324 | 353    | 1147       | 261 | 324 | 389    |
| CVVM206 - 6205 - (B) - Ratio |         | 15    | 6   | 1127     | 340 | 394 | 428    | 1292       | 340 | 394 | 473    |
| CVVM25 - 6205 - (B) - Ratio  |         | 18.5  | 4   | 1127     | 340 | 394 | 428    | 1292       | 340 | 394 | 473    |
| CVVM30 - 6205 - (B) - Ratio  |         | 22    | 4   | 1127     | 340 | 394 | 428    | 1292       | 340 | 394 | 473    |
| CVVM306 - 6205 - (B) - Ratio |         | 22    | 6   | 1127     | 340 | 394 | 441    | 1292       | 340 | 394 | 486    |
| CVVM40 - 6205 - (B) - Ratio  |         | 30    | 4   | 1127     | 340 | 394 | 441    | 1292       | 340 | 394 | 486    |
| CVVM406 - 6205 - (B) - Ratio |         | 30    | 6   | 1242     | 340 | 394 | 479    | 1457       | 340 | 394 | 573    |
| CVVM50 - 6205 - (B) - Ratio  |         | 37    | 4   | 1242     | 340 | 394 | 479    | 1457       | 340 | 394 | 573    |
| CVVM506 - 6205 - (B) - Ratio |         | 37    | 6   | 1242     | 340 | 394 | 479    | 1457       | 340 | 394 | 573    |
| CVVM60 - 6205 - (B) - Ratio  |         | 45    | 4   | 1242     | 340 | 394 | 479    | 1457       | 340 | 394 | 573    |
| CVVM606 - 6205 - (B) - Ratio |         | 45    | 6   | 1297     | 390 | 484 | 572    | -          | -   | -   | -      |
| CVVM75 - 6205 - (B) - Ratio  |         | 55    | 4   | 1297     | 390 | 484 | 572    | -          | -   | -   | -      |
| CVVM15 - 6215 - (B) - Ratio  |         | 11    | 4   | 996      | 211 | 251 | 377    | 1091       | 211 | 251 | 395    |
| CVVM20 - 6215 - (B) - Ratio  |         | 15    | 4   | 1066     | 261 | 324 | 432    | 1171       | 261 | 324 | 467    |
| CVVM206 - 6215 - (B) - Ratio |         | 15    | 6   | 1151     | 340 | 394 | 501    | 1316       | 340 | 394 | 546    |
| CVVM25 - 6215 - (B) - Ratio  |         | 18.5  | 4   | 1151     | 340 | 394 | 501    | 1316       | 340 | 394 | 546    |
| CVVM256 - 6215 - (B) - Ratio |         | 18.5  | 6   | 1151     | 340 | 394 | 514    | 1316       | 340 | 394 | 559    |
| CVVM30 - 6215 - (B) - Ratio  |         | 22    | 4   | 1151     | 340 | 394 | 501    | 1316       | 340 | 394 | 546    |
| CVVM306 - 6215 - (B) - Ratio |         | 22    | 6   | 1151     | 340 | 394 | 514    | 1316       | 340 | 394 | 559    |
| CVVM40 - 6215 - (B) - Ratio  |         | 30    | 4   | 1151     | 340 | 394 | 514    | 1316       | 340 | 394 | 559    |
| CVVM406 - 6215 - (B) - Ratio |         | 30    | 6   | 1266     | 340 | 394 | 569    | 1481       | 340 | 394 | 664    |
| CVVM50 - 6215 - (B) - Ratio  |         | 37    | 4   | 1266     | 340 | 394 | 569    | 1481       | 340 | 394 | 664    |
| CVVM506 - 6215 - (B) - Ratio |         | 37    | 6   | 1266     | 340 | 394 | 569    | 1481       | 340 | 394 | 664    |
| CVVM60 - 6215 - (B) - Ratio  |         | 45    | 4   | 1266     | 340 | 394 | 569    | 1481       | 340 | 394 | 664    |
| CVVM606 - 6215 - (B) - Ratio |         | 45    | 6   | 1321     | 390 | 484 | 662    | -          | -   | -   | -      |
| CVVM75 - 6215 - (B) - Ratio  |         | 55    | 4   | 1321     | 390 | 484 | 662    | -          | -   | -   | -      |

Note: 1. [ ] indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

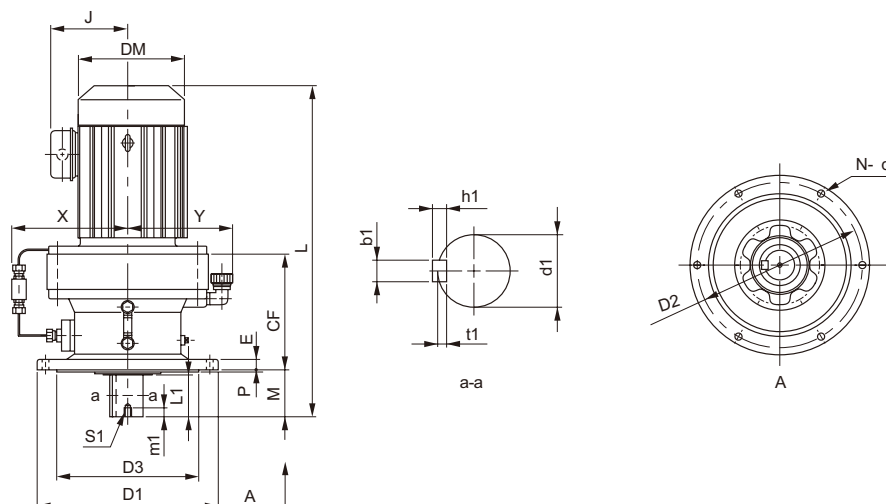
3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "f8."



# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 6225 to 6235



GEARMOTORS

Dimension Tables  
CVVM

| Frame size | CF  | D1  | D2  | D3  | M   | E  | P  | N | d  | X   | Y   | Output Shaft <span>Note: 2, 3, 6</span> |     |    |    |    |        |
|------------|-----|-----|-----|-----|-----|----|----|---|----|-----|-----|-----------------------------------------|-----|----|----|----|--------|
|            |     |     |     |     |     |    |    |   |    |     |     | d1                                      | L1  | b1 | h1 | t1 | S1 m1  |
| 6225       | 356 | 535 | 475 | 415 | 210 | 35 | 10 | 8 | 27 | 352 | 326 | 120                                     | 165 | 32 | 18 | 11 | M20 34 |
| 6235       | 378 | 570 | 510 | 450 | 250 | 40 | 10 | 8 | 27 | 359 | 344 | 130                                     | 200 | 32 | 18 | 11 | M24 41 |

| Model                        | Note: 5 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                              |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM206 - 6225 - (B) - Ratio |         | 15    | 6   | 1191     | 340 | 394 | 593    | 1356       | 340 | 394 | 638    |
| CVVM25 - 6225 - (B) - Ratio  |         | 18.5  | 4   | 1191     | 340 | 394 | 593    | 1356       | 340 | 394 | 638    |
| CVVM256 - 6225 - (B) - Ratio |         | 18.5  | 6   | 1191     | 340 | 394 | 606    | 1356       | 340 | 394 | 651    |
| CVVM30 - 6225 - (B) - Ratio  |         | 22    | 4   | 1191     | 340 | 394 | 593    | 1356       | 340 | 394 | 638    |
| CVVM306 - 6225 - (B) - Ratio |         | 22    | 6   | 1191     | 340 | 394 | 606    | 1356       | 340 | 394 | 651    |
| CVVM40 - 6225 - (B) - Ratio  |         | 30    | 4   | 1191     | 340 | 394 | 606    | 1356       | 340 | 394 | 651    |
| CVVM406 - 6225 - (B) - Ratio |         | 30    | 6   | 1306     | 340 | 394 | 660    | 1521       | 340 | 394 | 755    |
| CVVM50 - 6225 - (B) - Ratio  |         | 37    | 4   | 1306     | 340 | 394 | 660    | 1521       | 340 | 394 | 755    |
| CVVM506 - 6225 - (B) - Ratio |         | 37    | 6   | 1306     | 340 | 394 | 660    | 1521       | 340 | 394 | 755    |
| CVVM60 - 6225 - (B) - Ratio  |         | 45    | 4   | 1306     | 340 | 394 | 660    | 1521       | 340 | 394 | 755    |
| CVVM606 - 6225 - (B) - Ratio |         | 45    | 6   | 1361     | 390 | 484 | 743    | -          | -   | -   | -      |
| CVVM75 - 6225 - (B) - Ratio  |         | 55    | 4   | 1361     | 390 | 484 | 743    | -          | -   | -   | -      |
| CVVM206 - 6235 - (B) - Ratio |         | 15    | 6   | 1253     | 340 | 394 | 653    | 1418       | 340 | 394 | 684    |
| CVVM256 - 6235 - (B) - Ratio |         | 18.5  | 6   | 1253     | 340 | 394 | 653    | 1418       | 340 | 394 | 698    |
| CVVM306 - 6235 - (B) - Ratio |         | 22    | 6   | 1253     | 340 | 394 | 653    | 1418       | 340 | 394 | 698    |
| CVVM406 - 6235 - (B) - Ratio |         | 30    | 6   | 1368     | 340 | 394 | 699    | 1583       | 340 | 394 | 787    |
| CVVM506 - 6235 - (B) - Ratio |         | 37    | 6   | 1368     | 340 | 394 | 699    | 1583       | 340 | 394 | 787    |
| CVVM606 - 6235 - (B) - Ratio |         | 45    | 6   | 1423     | 390 | 484 | 788    | -          | -   | -   | -      |
| CVVM756 - 6235 - (B) - Ratio |         | 55    | 6   | 1503     | 390 | 485 | 842    | -          | -   | -   | -      |

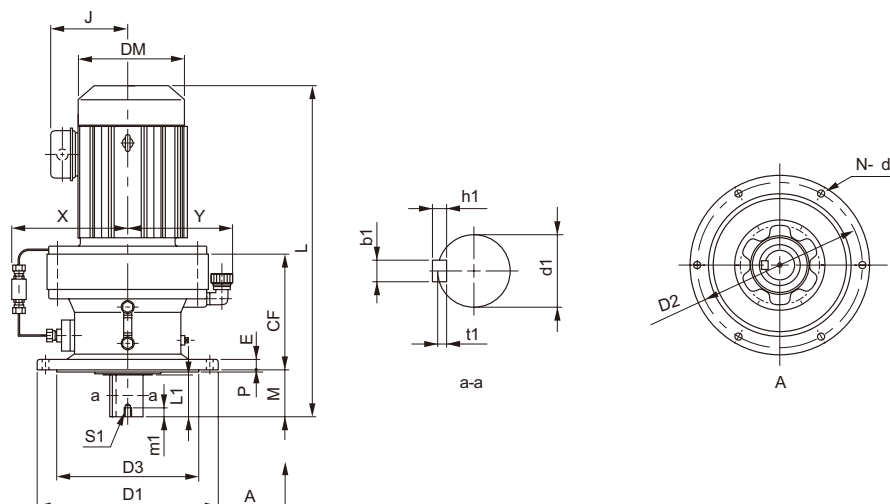
Note: 5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

## CVVM <sup>Note: 1</sup> - 6245 to 6265



| Frame size | CF  | D1  | D2  | D3  | M   | E  | P  | N | d  | X   | Y   | Output Shaft <sup>Note: 2, 3, 7</sup> |     |    |    |    |        |
|------------|-----|-----|-----|-----|-----|----|----|---|----|-----|-----|---------------------------------------|-----|----|----|----|--------|
|            |     |     |     |     |     |    |    |   |    |     |     | d1                                    | L1  | b1 | h1 | t1 | S1 m1  |
| 6245       | 407 | 635 | 560 | 485 | 250 | 40 | 10 | 8 | 33 | 370 | 371 | 140                                   | 200 | 36 | 20 | 12 | M24 41 |
| 6255       | 480 | 685 | 610 | 535 | 295 | 45 | 10 | 8 | 33 | 426 | 399 | 160                                   | 240 | 40 | 22 | 13 | M30 49 |
| 6265       | 532 | 750 | 660 | 570 | 360 | 50 | 10 | 8 | 39 | 460 | 431 | 170                                   | 300 | 40 | 22 | 13 | M30 49 |

| Model                        | Note: 6 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                              |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM206 - 6245 - (B) - Ratio |         | 15    | 6   | 1282     | 340 | 394 | 759    | 1447       | 340 | 394 | 792    |
| CVVM256 - 6245 - (B) - Ratio |         | 18.5  | 6   | 1282     | 340 | 394 | 759    | 1447       | 340 | 394 | 806    |
| CVVM306 - 6245 - (B) - Ratio |         | 22    | 6   | 1282     | 340 | 394 | 759    | 1447       | 340 | 394 | 806    |
| CVVM406 - 6245 - (B) - Ratio |         | 30    | 6   | 1397     | 340 | 394 | 805    | 1612       | 340 | 394 | 893    |
| CVVM506 - 6245 - (B) - Ratio |         | 37    | 6   | 1397     | 340 | 394 | 805    | 1612       | 340 | 394 | 893    |
| CVVM606 - 6245 - (B) - Ratio |         | 45    | 6   | 1452     | 390 | 484 | 896    | -          | -   | -   | -      |
| CVVM756 - 6245 - (B) - Ratio |         | 55    | 6   | 1532     | 390 | 485 | 945    | -          | -   | -   | -      |
| CVVM206 - 6255 - (B) - Ratio |         | 15    | 6   | 1400     | 340 | 394 | 1045   | 1565       | 340 | 394 | 1123   |
| CVVM256 - 6255 - (B) - Ratio |         | 18.5  | 6   | 1400     | 340 | 394 | 1045   | 1565       | 340 | 394 | 1137   |
| CVVM306 - 6255 - (B) - Ratio |         | 22    | 6   | 1400     | 340 | 394 | 1045   | 1565       | 340 | 394 | 1137   |
| CVVM406 - 6255 - (B) - Ratio |         | 30    | 6   | 1515     | 340 | 394 | 1090   | 1730       | 340 | 394 | 1178   |
| CVVM506 - 6255 - (B) - Ratio |         | 37    | 6   | 1515     | 340 | 394 | 1090   | 1730       | 340 | 394 | 1178   |
| CVVM606 - 6255 - (B) - Ratio |         | 45    | 6   | 1570     | 390 | 484 | 1170   | -          | -   | -   | -      |
| CVVM756 - 6255 - (B) - Ratio |         | 55    | 6   | 1650     | 390 | 485 | 1225   | -          | -   | -   | -      |
| CVVM406 - 6265 - (B) - Ratio |         | 22    | 6   | 1517     | 340 | 394 | 1350   | 1727       | 340 | 394 | 1397   |
| CVVM406 - 6265 - (B) - Ratio |         | 30    | 6   | 1632     | 340 | 394 | 1395   | 1847       | 340 | 394 | 1483   |
| CVVM506 - 6265 - (B) - Ratio |         | 37    | 6   | 1632     | 340 | 394 | 1395   | 1847       | 340 | 394 | 1483   |
| CVVM606 - 6265 - (B) - Ratio |         | 45    | 6   | 1687     | 390 | 484 | 1490   | -          | -   | -   | -      |

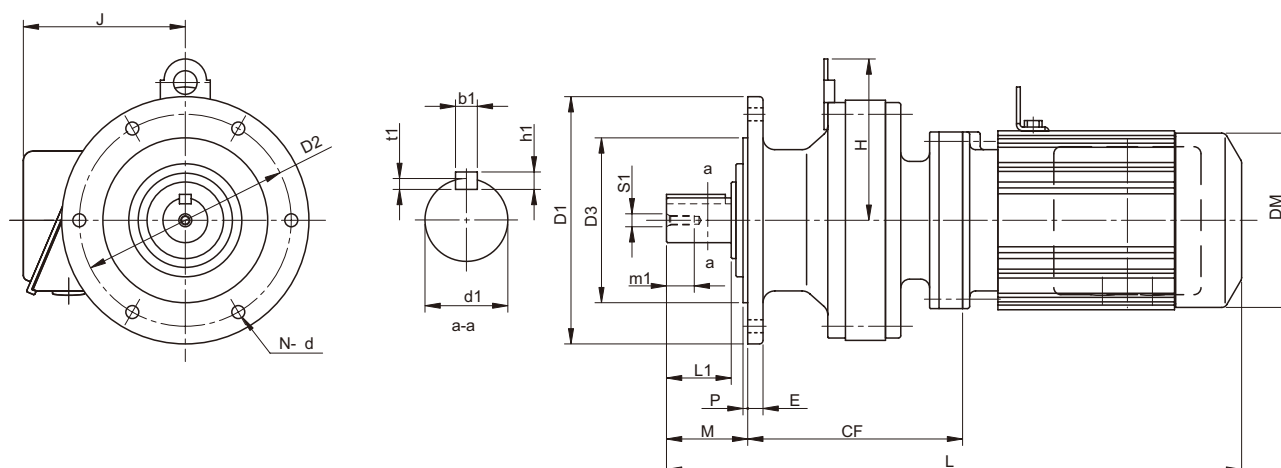
Note: 1. [ ] indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "f8."

## Dimension Tables Gearmotors (Universal Direction, V-Flange Mount)

CNVM<sup>Note: 1</sup> - 606□DA to 612□DB

GEARMOTORS

Dimension Tables  
CVVM

| Frame size<br>Note: 5 | CF  | D1  | D2  | D3  | M  | E  | P | N | d  | H   | Output Shaft<br>Note: 2, 3, 7 |    |    |    |     |    |    |
|-----------------------|-----|-----|-----|-----|----|----|---|---|----|-----|-------------------------------|----|----|----|-----|----|----|
|                       |     |     |     |     |    |    |   |   |    |     | d1                            | L1 | b1 | h1 | t1  | S1 | m1 |
| 606□DA                | 91  | 120 | 102 | 80  | 34 | 8  | 3 | 6 | 9  | -   | 14                            | 25 | 5  | 5  | 3   | M5 | 16 |
| 607□DA                | 89  | 160 | 134 | 110 | 42 | 9  | 3 | 4 | 11 | -   | 18                            | 30 | 6  | 6  | 3.5 | M6 | 16 |
| 609□DA                | 142 | 160 | 134 | 110 | 48 | 9  | 3 | 4 | 11 | 107 | 28                            | 35 | 8  | 7  | 4   | M8 | 20 |
| 610□DA                | 156 | 160 | 134 | 110 | 48 | 9  | 3 | 4 | 11 | 107 | 28                            | 35 | 8  | 7  | 4   | M8 | 20 |
| 612□DA                | 171 | 210 | 180 | 140 | 69 | 13 | 4 | 6 | 11 | 137 | 38                            | 55 | 10 | 8  | 5   | M8 | 20 |
| 612□DB                | 183 | 210 | 180 | 140 | 69 | 13 | 4 | 6 | 11 | -   | 38                            | 55 | 10 | 8  | 5   | M8 | 20 |

| Model<br>Note: 5, 6           | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CNVM01 - 606□DA - (B) - Ratio | 0.1   | 4   | 287      | 113 | 119 | 9      | 294        | 113 | 124 | 12     |
| CNVM01 - 607□DA - (B) - Ratio | 0.1   | 4   | 293      | 113 | 119 | 9      | 300        | 113 | 124 | 12     |
| CNVM02 - 607□DA - (B) - Ratio | 0.2   | 4   | 311      | 113 | 124 | 10     | 339        | 113 | 124 | 13     |
| CNVM01 - 609□DA - (B) - Ratio | 0.1   | 4   | 352      | 113 | 119 | 16     | 359        | 113 | 124 | 17     |
| CNVM02 - 609□DA - (B) - Ratio | 0.2   | 4   | 370      | 113 | 124 | 17     | 398        | 113 | 124 | 18     |
| CNVM03 - 609□DA - (B) - Ratio | 0.25  | 4   | 370      | 113 | 124 | 17     | 398        | 113 | 124 | 18     |
| CNVM05 - 609□DA - (B) - Ratio | 0.4   | 4   | 386      | 113 | 124 | 18     | 418        | 113 | 124 | 19     |
| CNVM01 - 610□DA - (B) - Ratio | 0.1   | 4   | 366      | 113 | 119 | 17     | 373        | 113 | 124 | 18     |
| CNVM02 - 610□DA - (B) - Ratio | 0.2   | 4   | 384      | 113 | 124 | 18     | 412        | 113 | 124 | 19     |
| CNVM03 - 610□DA - (B) - Ratio | 0.25  | 4   | 384      | 113 | 124 | 18     | 412        | 113 | 124 | 19     |
| CNVM05 - 610□DA - (B) - Ratio | 0.4   | 4   | 400      | 113 | 124 | 19     | 432        | 113 | 124 | 20     |
| CNVM01 - 612□DA - (B) - Ratio | 0.1   | 4   | 402      | 113 | 119 | 29     | 409        | 113 | 124 | 30     |
| CNVM02 - 612□DA - (B) - Ratio | 0.2   | 4   | 420      | 113 | 124 | 30     | 448        | 113 | 124 | 31     |
| CNVM03 - 612□DA - (B) - Ratio | 0.25  | 4   | 420      | 113 | 124 | 30     | 448        | 113 | 124 | 31     |
| CNVM05 - 612□DA - (B) - Ratio | 0.4   | 4   | 436      | 113 | 124 | 31     | 468        | 113 | 124 | 32     |
| CNVM01 - 612□DB - (B) - Ratio | 0.1   | 4   | 414      | 113 | 119 | 32     | 421        | 113 | 124 | 34     |
| CNVM02 - 612□DB - (B) - Ratio | 0.2   | 4   | 432      | 113 | 124 | 33     | 473        | 113 | 124 | 35     |
| CNVM03 - 612□DB - (B) - Ratio | 0.25  | 4   | 432      | 113 | 124 | 33     | 473        | 113 | 124 | 35     |
| CNVM05 - 612□DB - (B) - Ratio | 0.4   | 4   | 448      | 113 | 124 | 34     | 473        | 113 | 124 | 36     |
| CNVM08 - 612□DB - (B) - Ratio | 0.55  | 4   | 489      | 143 | 160 | 38     | 532        | 143 | 160 | 41     |
| CNVM1 - 612□DB - (B) - Ratio  | 0.75  | 4   | 489      | 143 | 160 | 38     | 532        | 143 | 160 | 41     |
| CNVM1H - 612□DB - (B) - Ratio | 1.1   | 4   | 516      | 148 | 169 | 42     | 578        | 148 | 169 | 47     |
| CNVM2 - 612□DB - (B) - Ratio  | 1.5   | 4   | 516      | 148 | 169 | 42     | 578        | 148 | 169 | 47     |

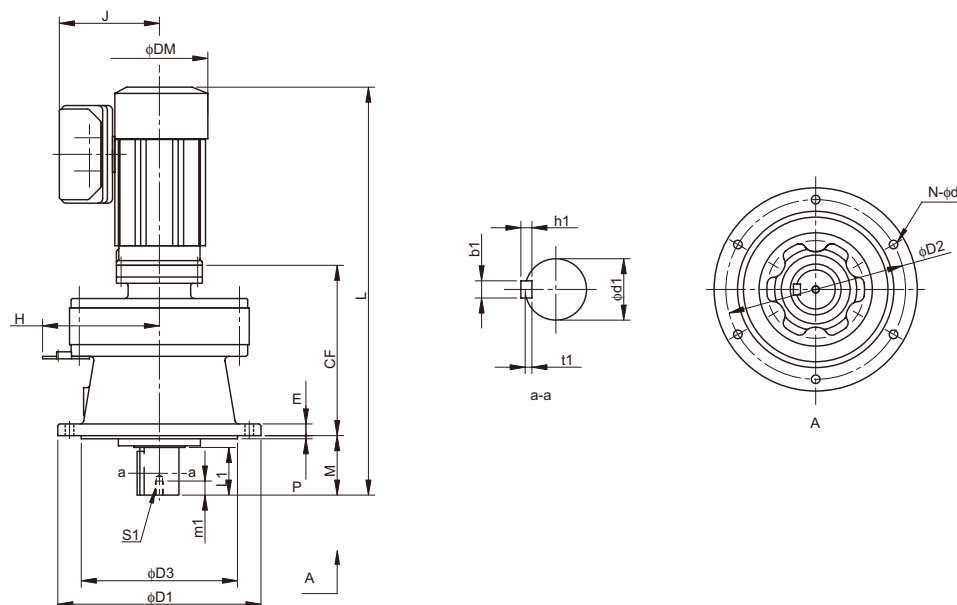
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 613□DA to 614□DC

| Frame size<br>Note: 5 | CF  | D1  | D2  | D3  | M  | E  | P | N | d  | H   | Output Shaft<br>Note: 2, 3, 7 |    |    |    |     |     |    |
|-----------------------|-----|-----|-----|-----|----|----|---|---|----|-----|-------------------------------|----|----|----|-----|-----|----|
|                       |     |     |     |     |    |    |   |   |    |     | d1                            | L1 | b1 | h1 | t1  | S1  | m1 |
| 613□DA                | 218 | 260 | 230 | 200 | 76 | 15 | 4 | 6 | 11 | 150 | 50                            | 61 | 14 | 9  | 5.5 | M10 | 18 |
| 613□DB                | 227 | 260 | 230 | 200 | 76 | 15 | 4 | 6 | 11 | 150 | 50                            | 61 | 14 | 9  | 5.5 | M10 | 18 |
| 613□DC                | 241 | 260 | 230 | 200 | 76 | 15 | 4 | 6 | 11 | -   | 50                            | 61 | 14 | 9  | 5.5 | M10 | 18 |
| 614□DA                | 218 | 260 | 230 | 200 | 96 | 15 | 4 | 6 | 11 | 150 | 50                            | 81 | 14 | 9  | 5.5 | M10 | 18 |
| 614□DB                | 227 | 260 | 230 | 200 | 96 | 15 | 4 | 6 | 11 | 150 | 50                            | 81 | 14 | 9  | 5.5 | M10 | 18 |
| 614□DC                | 241 | 260 | 230 | 200 | 96 | 15 | 4 | 6 | 11 | -   | 50                            | 81 | 14 | 9  | 5.5 | M10 | 18 |

| Model<br>Note: 5, 6           | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM02 - 613□DA - (B) - Ratio | 0.2   | 4   | 474      | 113 | 124 | 45     | 502        | 113 | 124 | 45     |
| CVVM03 - 613□DA - (B) - Ratio | 0.25  | 4   | 494      | 113 | 124 | 45     | 522        | 113 | 124 | 45     |
| CVVM05 - 613□DA - (B) - Ratio | 0.4   | 4   | 490      | 113 | 124 | 48     | 522        | 113 | 124 | 49     |
| CVVM02 - 613□DB - (B) - Ratio | 0.2   | 4   | 483      | 113 | 124 | 48     | 511        | 113 | 124 | 50     |
| CVVM03 - 613□DB - (B) - Ratio | 0.25  | 4   | 483      | 113 | 124 | 48     | 511        | 113 | 124 | 50     |
| CVVM05 - 613□DB - (B) - Ratio | 0.4   | 4   | 499      | 113 | 124 | 49     | 531        | 113 | 124 | 51     |
| CVVM08 - 613□DB - (B) - Ratio | 0.55  | 4   | 540      | 143 | 160 | 53     | 583        | 143 | 160 | 56     |
| CVVM1 - 613□DB - (B) - Ratio  | 0.75  | 4   | 540      | 143 | 160 | 53     | 583        | 143 | 160 | 56     |
| CVVM1H - 613□DB - (B) - Ratio | 1.1   | 4   | 573      | 148 | 169 | 57     | 635        | 148 | 169 | 62     |
| CVVM2 - 613□DB - (B) - Ratio  | 1.5   | 4   | 573      | 148 | 169 | 57     | 635        | 148 | 169 | 62     |
| CVVM08 - 613□DC - (B) - Ratio | 0.55  | 4   | 554      | 143 | 160 | 56     | 597        | 143 | 160 | 59     |
| CVVM1 - 613□DC - (B) - Ratio  | 0.75  | 4   | 554      | 143 | 160 | 56     | 597        | 143 | 160 | 59     |
| CVVM2 - 613□DC - (B) - Ratio  | 1.5   | 4   | 587      | 148 | 169 | 60     | 649        | 148 | 169 | 65     |
| CVVM3 - 613□DC - (B) - Ratio  | 2.2   | 4   | 607      | 155 | 182 | 64     | 670        | 155 | 182 | 70     |
| CVVM02 - 614□DA - (B) - Ratio | 0.2   | 4   | 494      | 113 | 124 | 45     | 522        | 113 | 124 | 46     |
| CVVM03 - 614□DA - (B) - Ratio | 0.25  | 4   | 494      | 113 | 124 | 45     | 522        | 113 | 124 | 46     |
| CVVM05 - 614□DA - (B) - Ratio | 0.4   | 4   | 510      | 113 | 124 | 48     | 542        | 113 | 124 | 49     |
| CVVM02 - 614□DB - (B) - Ratio | 0.2   | 4   | 503      | 113 | 124 | 48     | 531        | 113 | 124 | 50     |
| CVVM03 - 614□DB - (B) - Ratio | 0.25  | 4   | 503      | 113 | 124 | 48     | 531        | 113 | 124 | 50     |
| CVVM05 - 614□DB - (B) - Ratio | 0.4   | 4   | 519      | 113 | 124 | 49     | 551        | 113 | 124 | 51     |
| CVVM08 - 614□DB - (B) - Ratio | 0.55  | 4   | 560      | 143 | 160 | 53     | 603        | 143 | 160 | 56     |
| CVVM1 - 614□DB - (B) - Ratio  | 0.75  | 4   | 560      | 143 | 160 | 53     | 603        | 143 | 160 | 56     |
| CVVM1H - 614□DB - (B) - Ratio | 1.1   | 4   | 593      | 148 | 169 | 57     | 655        | 148 | 169 | 62     |
| CVVM2 - 614□DB - (B) - Ratio  | 1.5   | 4   | 593      | 148 | 169 | 57     | 655        | 148 | 169 | 62     |
| CVVM08 - 614□DC - (B) - Ratio | 0.55  | 4   | 574      | 143 | 160 | 54     | 617        | 143 | 160 | 57     |
| CVVM1 - 614□DC - (B) - Ratio  | 0.75  | 4   | 574      | 143 | 160 | 54     | 617        | 143 | 160 | 57     |
| CVVM1H - 614□DC - (B) - Ratio | 1.1   | 4   | 607      | 148 | 169 | 58     | 669        | 148 | 169 | 63     |
| CVVM2 - 614□DC - (B) - Ratio  | 1.5   | 4   | 607      | 148 | 169 | 58     | 669        | 148 | 169 | 63     |
| CVVM3 - 614□DC - (B) - Ratio  | 2.2   | 4   | 627      | 155 | 182 | 62     | 690        | 155 | 182 | 68     |

Note: 1. □ indicates motor capacity.

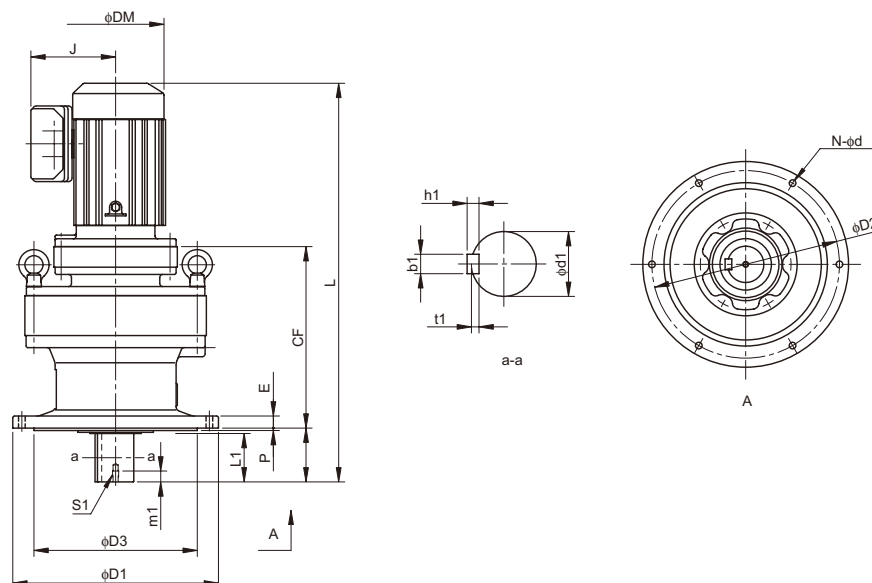
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "f8."

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 616□DA to 618□DA



| Frame size<br><small>Note: 5</small> | CF  | D1  | D2  | D3  | M   | E  | P | N | d  | H | Output Shaft<br><small>Note: 2, 3, 7</small> |     |    |    |     |     |    |
|--------------------------------------|-----|-----|-----|-----|-----|----|---|---|----|---|----------------------------------------------|-----|----|----|-----|-----|----|
|                                      |     |     |     |     |     |    |   |   |    |   | d1                                           | L1  | b1 | h1 | t1  | S1  | m1 |
| 616□DA                               | 285 | 340 | 310 | 270 | 89  | 20 | 4 | 6 | 11 | - | 60                                           | 80  | 18 | 11 | 7   | M10 | 18 |
| 616□DB                               | 299 | 340 | 310 | 270 | 89  | 20 | 4 | 6 | 11 | - | 60                                           | 80  | 18 | 11 | 7   | M10 | 18 |
| 617□DA                               | 324 | 400 | 360 | 316 | 94  | 22 | 5 | 8 | 14 | - | 70                                           | 84  | 20 | 12 | 7.5 | M12 | 24 |
| 617□DB                               | 338 | 400 | 360 | 316 | 94  | 22 | 5 | 8 | 14 | - | 70                                           | 84  | 20 | 12 | 7.5 | M12 | 24 |
| 618□DA                               | 364 | 430 | 390 | 345 | 110 | 22 | 5 | 8 | 18 | - | 80                                           | 100 | 22 | 14 | 9   | M12 | 24 |

| Model<br><small>Note: 5, 6</small> | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|------------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                                    | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM02 - 616□DA - (B) - Ratio      | 0.2   | 4   | 554      | 113 | 124 | 84     | 581        | 113 | 124 | 86     |
| CVVM03 - 616□DA - (B) - Ratio      | 0.25  | 4   | 554      | 113 | 124 | 84     | 581        | 113 | 124 | 86     |
| CVVM05 - 616□DA - (B) - Ratio      | 0.4   | 4   | 570      | 113 | 124 | 85     | 601        | 113 | 124 | 87     |
| CVVM08 - 616□DA - (B) - Ratio      | 0.55  | 4   | 611      | 143 | 160 | 89     | 653        | 143 | 160 | 92     |
| CVVM1 - 616□DA - (B) - Ratio       | 0.75  | 4   | 611      | 143 | 160 | 89     | 653        | 143 | 160 | 92     |
| CVVM1H - 616□DA - (B) - Ratio      | 1.1   | 4   | 643      | 148 | 169 | 93     | 705        | 148 | 169 | 98     |
| CVVM2 - 616□DA - (B) - Ratio       | 1.5   | 4   | 643      | 148 | 169 | 93     | 705        | 148 | 169 | 98     |
| CVVM08 - 616□DB - (B) - Ratio      | 0.55  | 4   | 625      | 143 | 160 | 91     | 667        | 143 | 160 | 94     |
| CVVM1 - 616□DB - (B) - Ratio       | 0.75  | 4   | 625      | 143 | 160 | 91     | 667        | 143 | 160 | 94     |
| CVVM1H - 616□DB - (B) - Ratio      | 1.1   | 4   | 658      | 148 | 169 | 95     | 719        | 148 | 169 | 100    |
| CVVM2 - 616□DB - (B) - Ratio       | 1.5   | 4   | 658      | 148 | 169 | 95     | 719        | 148 | 169 | 100    |
| CVVM3 - 616□DB - (B) - Ratio       | 2.2   | 4   | 678      | 155 | 182 | 99     | 740        | 155 | 182 | 105    |
| CVVM02 - 617□DA - (B) - Ratio      | 0.2   | 4   | 598      | 113 | 124 | 120    | 626        | 113 | 124 | 122    |
| CVVM03 - 617□DA - (B) - Ratio      | 0.25  | 4   | 598      | 113 | 124 | 120    | 626        | 113 | 124 | 122    |
| CVVM05 - 617□DA - (B) - Ratio      | 0.4   | 4   | 614      | 113 | 124 | 121    | 646        | 113 | 124 | 123    |
| CVVM08 - 617□DA - (B) - Ratio      | 0.55  | 4   | 655      | 143 | 160 | 125    | 698        | 143 | 160 | 128    |
| CVVM1 - 617□DA - (B) - Ratio       | 0.75  | 4   | 655      | 143 | 160 | 125    | 698        | 143 | 160 | 128    |
| CVVM1H - 617□DA - (B) - Ratio      | 1.1   | 4   | 688      | 148 | 169 | 129    | 750        | 148 | 169 | 134    |
| CVVM2 - 617□DA - (B) - Ratio       | 1.5   | 4   | 688      | 148 | 169 | 129    | 750        | 148 | 169 | 134    |
| CVVM08 - 617□DB - (B) - Ratio      | 0.55  | 4   | 669      | 143 | 160 | 122    | 712        | 143 | 160 | 129    |
| CVVM1 - 617□DB - (B) - Ratio       | 0.75  | 4   | 669      | 143 | 160 | 122    | 712        | 143 | 160 | 129    |
| CVVM1H - 617□DB - (B) - Ratio      | 1.1   | 4   | 702      | 148 | 169 | 131    | 764        | 148 | 169 | 136    |
| CVVM2 - 617□DB - (B) - Ratio       | 1.5   | 4   | 702      | 148 | 169 | 131    | 764        | 148 | 169 | 136    |
| CVVM3 - 617□DB - (B) - Ratio       | 2.2   | 4   | 722      | 155 | 182 | 135    | 785        | 155 | 182 | 141    |
| CVVM05 - 618□DA - (B) - Ratio      | 0.4   | 4   | 670      | 113 | 124 | 154    | 702        | 113 | 124 | 156    |
| CVVM08 - 618□DA - (B) - Ratio      | 0.55  | 4   | 711      | 143 | 160 | 158    | 754        | 143 | 160 | 161    |
| CVVM1 - 618□DA - (B) - Ratio       | 0.75  | 4   | 711      | 143 | 160 | 158    | 754        | 143 | 160 | 161    |
| CVVM1H - 618□DA - (B) - Ratio      | 1.1   | 4   | 744      | 148 | 169 | 162    | 806        | 148 | 169 | 167    |
| CVVM2 - 618□DA - (B) - Ratio       | 1.5   | 4   | 744      | 148 | 169 | 162    | 806        | 148 | 169 | 167    |
| CVVM3 - 618□DA - (B) - Ratio       | 2.2   | 4   | 764      | 155 | 182 | 166    | 827        | 155 | 182 | 172    |

Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

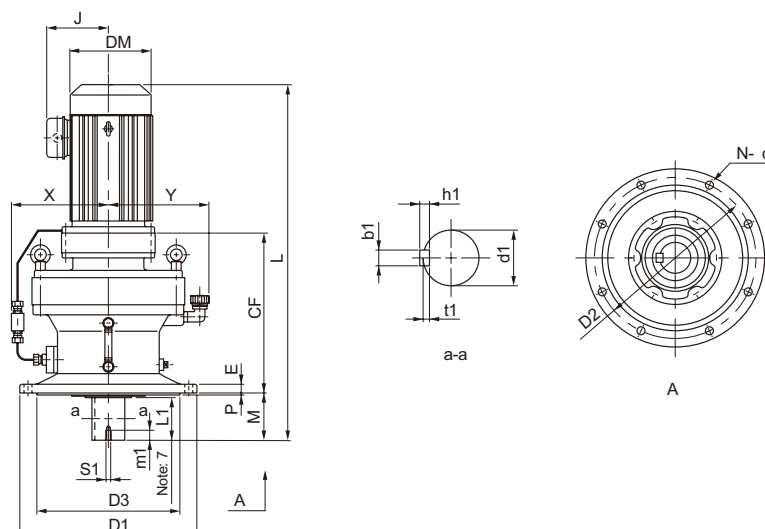
6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

## CVVM<sup>Note: 1</sup> - 616□DC to 618□DB



| Frame size<br><small>Note: 5</small> | CF  | D1  | D2  | D3  | M   | E  | P | N | d  | X   | Y   | Output Shaft |     |    |    |     |     |    | Note: 2, 3, 7 |  |
|--------------------------------------|-----|-----|-----|-----|-----|----|---|---|----|-----|-----|--------------|-----|----|----|-----|-----|----|---------------|--|
|                                      |     |     |     |     |     |    |   |   |    |     |     | d1           | L1  | b1 | h1 | t1  | S1  | m1 |               |  |
| 616□DC                               | 300 | 340 | 310 | 270 | 89  | 20 | 4 | 6 | 11 | 196 | 200 | 60           | 80  | 18 | 11 | 7   | M10 | 18 |               |  |
| 617□DC                               | 342 | 400 | 360 | 316 | 94  | 22 | 5 | 8 | 14 | 218 | 225 | 70           | 84  | 20 | 12 | 7.5 | M12 | 24 |               |  |
| 618□DB                               | 386 | 430 | 390 | 345 | 110 | 22 | 5 | 8 | 18 | 233 | 240 | 80           | 100 | 22 | 14 | 9   | M12 | 24 |               |  |

| Model<br>Note: 5, 6           | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM1H - 616□DC - (B) - Ratio | 1.1   | 4   | 659      | 148 | 169 | 103    | 721        | 148 | 169 | 108    |
| CVVM2 - 616□DC - (B) - Ratio  | 1.5   | 4   | 659      | 148 | 169 | 103    | 721        | 148 | 169 | 108    |
| CVVM3 - 616□DC - (B) - Ratio  | 2.2   | 4   | 679      | 155 | 182 | 107    | 742        | 155 | 182 | 114    |
| CVVM4 - 616□DC - (B) - Ratio  | 3.0   | 4   | 702      | 166 | 222 | 117    | 774        | 166 | 222 | 127    |
| CVVM5 - 616□DC - (B) - Ratio  | 3.7   | 4   | 702      | 166 | 222 | 117    | 774        | 166 | 222 | 127    |
| CVVM8 - 616□DC - (B) - Ratio  | 5.5   | 4   | 746      | 166 | 222 | 127    | 818        | 166 | 222 | 131    |
| CVVM1H - 617□DC - (B) - Ratio | 1.1   | 4   | 706      | 148 | 169 | 138    | 768        | 148 | 169 | 143    |
| CVVM2 - 617□DC - (B) - Ratio  | 1.5   | 4   | 706      | 148 | 169 | 138    | 768        | 148 | 169 | 143    |
| CVVM3 - 617□DC - (B) - Ratio  | 2.2   | 4   | 726      | 155 | 182 | 142    | 789        | 155 | 182 | 152    |
| CVVM4 - 617□DC - (B) - Ratio  | 3.0   | 4   | 749      | 166 | 222 | 152    | 821        | 166 | 222 | 165    |
| CVVM5 - 617□DC - (B) - Ratio  | 3.7   | 4   | 749      | 166 | 222 | 152    | 821        | 166 | 222 | 165    |
| CVVM8 - 617□DC - (B) - Ratio  | 5.5   | 4   | 793      | 166 | 222 | 162    | 865        | 166 | 222 | 172    |
| CVVM1H - 618□DB - (B) - Ratio | 1.1   | 4   | 766      | 148 | 169 | 179    | 828        | 148 | 169 | 184    |
| CVVM2 - 618□DB - (B) - Ratio  | 1.5   | 4   | 766      | 148 | 169 | 179    | 828        | 148 | 169 | 184    |
| CVVM3 - 618□DB - (B) - Ratio  | 2.2   | 4   | 786      | 155 | 182 | 183    | 849        | 155 | 182 | 190    |
| CVVM4 - 618□DB - (B) - Ratio  | 3.0   | 4   | 809      | 166 | 222 | 193    | 881        | 166 | 222 | 203    |
| CVVM5 - 618□DB - (B) - Ratio  | 3.7   | 4   | 809      | 166 | 222 | 193    | 881        | 166 | 222 | 203    |
| CVVM8 - 618□DB - (B) - Ratio  | 5.5   | 4   | 853      | 166 | 222 | 200    | 925        | 166 | 222 | 210    |
| CVVM10 - 618□DB - (B) - Ratio | 7.5   | 4   | 876      | 211 | 251 | 215    | 971        | 211 | 251 | 231    |
| CVVM15 - 618□DB - (B) - Ratio | 11    | 4   | 936      | 211 | 251 | 229    | 1031       | 211 | 251 | 247    |

Note: 1. □ indicates motor capacity.

2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

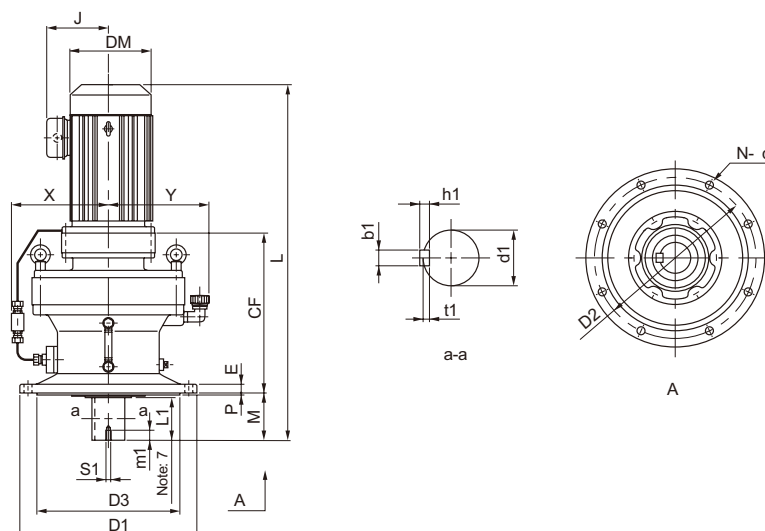
3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "f8."



# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 619□DA to 619□DB



| Frame size<br>Note: 5 | CF  | D1  | D2  | D3  | M   | E  | P | N  | d  | X   | Y   | Output Shaft<br>Note: 2, 3, 7 |     |    |    |    |        |
|-----------------------|-----|-----|-----|-----|-----|----|---|----|----|-----|-----|-------------------------------|-----|----|----|----|--------|
|                       |     |     |     |     |     |    |   |    |    |     |     | d1                            | L1  | b1 | h1 | t1 | S1 m1  |
| 619□DA                | 411 | 490 | 450 | 400 | 145 | 30 | 6 | 12 | 18 | 255 | 270 | 95                            | 125 | 25 | 14 | 9  | M20 34 |
| 619□DB                | 427 | 490 | 450 | 400 | 145 | 30 | 6 | 12 | 18 | 255 | 270 | 95                            | 125 | 25 | 14 | 9  | M20 34 |

| Model<br>Note: 5, 6           | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM1 - 619□DA - (B) - Ratio  | 0.75  | 4   | 793      | 143 | 160 | 238    | 836        | 143 | 160 | 241    |
| CVVM1H - 619□DA - (B) - Ratio | 1.1   | 4   | 826      | 148 | 169 | 242    | 888        | 148 | 169 | 247    |
| CVVM2 - 619□DA - (B) - Ratio  | 1.5   | 4   | 826      | 148 | 169 | 242    | 888        | 148 | 169 | 247    |
| CVVM3 - 619□DA - (B) - Ratio  | 2.2   | 4   | 846      | 155 | 182 | 246    | 909        | 155 | 182 | 253    |
| CVVM4 - 619□DA - (B) - Ratio  | 3.0   | 4   | 869      | 166 | 222 | 256    | 941        | 166 | 222 | 266    |
| CVVM5 - 619□DA - (B) - Ratio  | 3.7   | 4   | 869      | 166 | 222 | 256    | 941        | 166 | 222 | 266    |
| CVVM8 - 619□DA - (B) - Ratio  | 5.5   | 4   | 913      | 166 | 222 | 263    | 985        | 166 | 222 | 273    |
| CVVM2 - 619□DB - (B) - Ratio  | 1.5   | 4   | 842      | 148 | 169 | 249    | 904        | 148 | 169 | 254    |
| CVVM3 - 619□DB - (B) - Ratio  | 2.2   | 4   | 862      | 155 | 182 | 253    | 925        | 155 | 182 | 260    |
| CVVM4 - 619□DB - (B) - Ratio  | 3.0   | 4   | 885      | 166 | 222 | 263    | 957        | 166 | 222 | 273    |
| CVVM5 - 619□DB - (B) - Ratio  | 3.7   | 4   | 885      | 166 | 222 | 263    | 957        | 166 | 222 | 273    |
| CVVM8 - 619□DB - (B) - Ratio  | 5.5   | 4   | 929      | 166 | 222 | 270    | 1001       | 166 | 222 | 280    |
| CVVM10 - 619□DB - (B) - Ratio | 7.5   | 4   | 952      | 211 | 251 | 285    | 1047       | 211 | 251 | 303    |
| CVVM15 - 619□DB - (B) - Ratio | 11    | 4   | 1012     | 211 | 251 | 299    | 1107       | 211 | 251 | 317    |
| CVVM20 - 619□DB - (B) - Ratio | 15    | 4   | 1102     | 261 | 324 | 351    | 1207       | 261 | 324 | 385    |

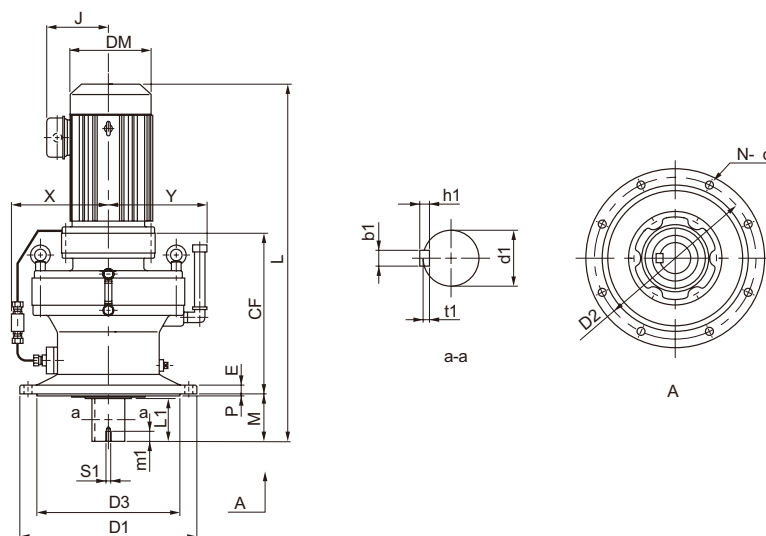
Note: 5. □ indicates 0 or 5, expressing combination with reduction ratio. Refer to the Selection Table for details.

6. "B" after the frame size indicates models equipped with brake.

7. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

8. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 6205DA to 6215DA

| Frame size | CF  | D1  | D2  | D3  | M   | E  | P | N | d  | X   | Y   | Output Shaft <span>Note: 2, 3, 6</span> |     |    |    |    |     |    |
|------------|-----|-----|-----|-----|-----|----|---|---|----|-----|-----|-----------------------------------------|-----|----|----|----|-----|----|
|            |     |     |     |     |     |    |   |   |    |     |     | d1                                      | L1  | b1 | h1 | t1 | S1  | m1 |
| 6205DA     | 393 | 455 | 405 | 355 | 204 | 30 | 5 | 8 | 22 | 341 | 287 | 100                                     | 165 | 28 | 16 | 10 | M20 | 34 |
| 6205DB     | 420 | 455 | 405 | 355 | 204 | 30 | 5 | 8 | 22 | 341 | 287 | 100                                     | 165 | 28 | 16 | 10 | M20 | 34 |
| 6215DA     | 447 | 490 | 440 | 390 | 203 | 35 | 7 | 8 | 24 | 348 | 306 | 110                                     | 165 | 28 | 16 | 10 | M20 | 34 |

| Model                         | Note: 5 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM1 - 6205DA - (B) - Ratio  |         | 0.75  | 4   | 834      | 143 | 160 | 254    | 877        | 143 | 160 | 257    |
| CVVM2 - 6205DA - (B) - Ratio  |         | 1.5   | 4   | 867      | 148 | 169 | 257    | 929        | 148 | 169 | 263    |
| CVVM3 - 6205DA - (B) - Ratio  |         | 2.2   | 4   | 887      | 155 | 182 | 262    | 949        | 155 | 182 | 269    |
| CVVM4 - 6205DA - (B) - Ratio  |         | 3.0   | 4   | 910      | 166 | 222 | 272    | 982        | 166 | 222 | 282    |
| CVVM5 - 6205DA - (B) - Ratio  |         | 3.7   | 4   | 910      | 166 | 222 | 272    | 982        | 166 | 222 | 282    |
| CVVM8 - 6205DA - (B) - Ratio  |         | 5.5   | 4   | 954      | 166 | 222 | 279    | 1026       | 166 | 222 | 289    |
| CVVM3 - 6205DB - (B) - Ratio  |         | 2.2   | 4   | 914      | 155 | 182 | 274    | 977        | 155 | 182 | 281    |
| CVVM4 - 6205DB - (B) - Ratio  |         | 3.0   | 4   | 937      | 166 | 222 | 284    | 1009       | 166 | 222 | 294    |
| CVVM5 - 6205DB - (B) - Ratio  |         | 3.7   | 4   | 937      | 166 | 222 | 284    | 1009       | 166 | 222 | 301    |
| CVVM8 - 6205DB - (B) - Ratio  |         | 5.5   | 4   | 981      | 166 | 222 | 291    | 1053       | 166 | 222 | 324    |
| CVVM10 - 6205DB - (B) - Ratio |         | 7.5   | 4   | 1004     | 211 | 251 | 306    | 1099       | 211 | 251 | 347    |
| CVVM15 - 6205DB - (B) - Ratio |         | 11    | 4   | 1064     | 211 | 251 | 320    | 1159       | 211 | 251 | 361    |
| CVVM20 - 6205DB - (B) - Ratio |         | 15    | 4   | 1154     | 259 | 324 | 372    | 1259       | 259 | 324 | 429    |
| CVVM2 - 6215DA - (B) - Ratio  |         | 1.5   | 4   | 920      | 148 | 169 | 331    | 982        | 148 | 169 | 336    |
| CVVM3 - 6215DA - (B) - Ratio  |         | 2.2   | 4   | 940      | 155 | 182 | 334    | 1003       | 155 | 182 | 341    |
| CVVM4 - 6215DA - (B) - Ratio  |         | 3.0   | 4   | 963      | 166 | 222 | 344    | 1035       | 166 | 222 | 354    |
| CVVM5 - 6215DA - (B) - Ratio  |         | 3.7   | 4   | 963      | 166 | 222 | 344    | 1035       | 166 | 222 | 354    |
| CVVM8 - 6215DA - (B) - Ratio  |         | 5.5   | 4   | 1007     | 166 | 222 | 351    | 1079       | 166 | 222 | 361    |
| CVVM10 - 6215DA - (B) - Ratio |         | 7.5   | 4   | 1030     | 211 | 251 | 366    | 1125       | 211 | 251 | 384    |
| CVVM15 - 6215DA - (B) - Ratio |         | 11    | 4   | 1090     | 211 | 251 | 380    | 1185       | 211 | 251 | 398    |
| CVVM20 - 6215DA - (B) - Ratio |         | 15    | 4   | 1180     | 261 | 324 | 432    | 1285       | 261 | 324 | 466    |

Note: 1. [ ] indicates motor capacity.

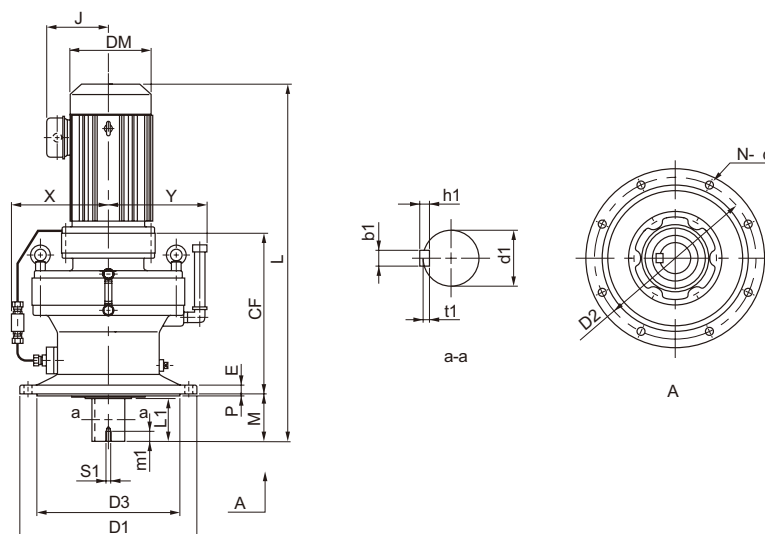
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "f8."

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

## CVVM<sup>Note: 1</sup> - 6215DB to 6225DB



GEARMOTORS

Dimension Tables  
CVVM

| Frame size | CF  | D1  | D2  | D3  | M   | E  | P  | N | d  | X   | Y   | Output Shaft <span>Note: 2, 3, 6</span> |     |    |    |    |        |
|------------|-----|-----|-----|-----|-----|----|----|---|----|-----|-----|-----------------------------------------|-----|----|----|----|--------|
|            |     |     |     |     |     |    |    |   |    |     |     | d1                                      | L1  | b1 | h1 | t1 | S1 m1  |
| 6215DB     | 472 | 490 | 440 | 390 | 203 | 35 | 7  | 8 | 24 | 348 | 306 | 110                                     | 165 | 28 | 16 | 10 | M20 34 |
| 6225DA     | 482 | 535 | 475 | 415 | 210 | 35 | 10 | 8 | 27 | 352 | 326 | 120                                     | 165 | 32 | 18 | 11 | M20 34 |
| 6225DB     | 525 | 535 | 475 | 415 | 210 | 35 | 10 | 8 | 27 | 352 | 326 | 120                                     | 165 | 32 | 18 | 11 | M20 34 |

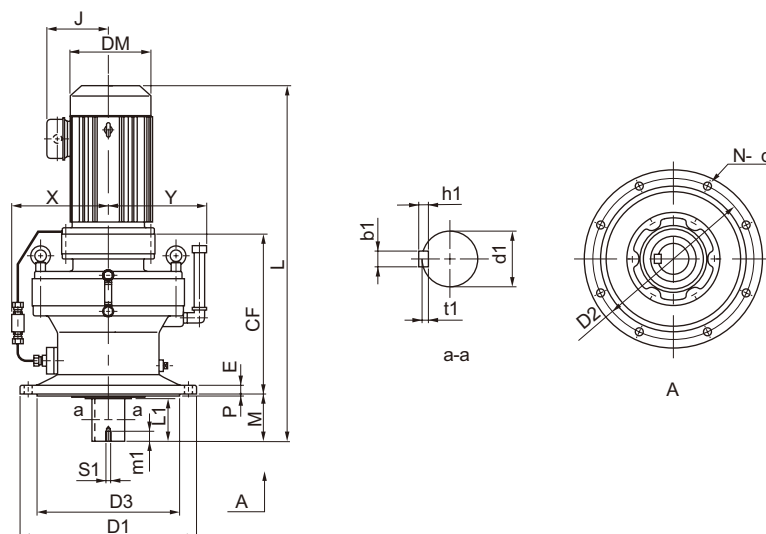
| Model                         | Note: 5 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM5 - 6215DB - (B) - Ratio  |         | 3.7   | 4   | 993      | 166 | 222 | 377    | 1065       | 166 | 222 | 387    |
| CVVM8 - 6215DB - (B) - Ratio  |         | 5.5   | 4   | 1037     | 166 | 222 | 384    | 1109       | 166 | 222 | 400    |
| CVVM10 - 6215DB - (B) - Ratio |         | 7.5   | 4   | 1060     | 211 | 251 | 400    | 1155       | 211 | 251 | 417    |
| CVVM15 - 6215DB - (B) - Ratio |         | 11    | 4   | 1120     | 211 | 251 | 414    | 1215       | 211 | 251 | 431    |
| CVVM20 - 6215DB - (B) - Ratio |         | 15    | 4   | 1205     | 261 | 324 | 467    | 1310       | 261 | 324 | 500    |
| CVVM25 - 6215DB - (B) - Ratio |         | 18.5  | 4   | 1300     | 340 | 394 | 543    | 1465       | 340 | 394 | 587    |
| CVVM30 - 6215DB - (B) - Ratio |         | 22    | 4   | 1300     | 340 | 394 | 543    | 1465       | 340 | 394 | 587    |
| CVVM2 - 6225DA - (B) - Ratio  |         | 1.5   | 4   | 962      | 148 | 169 | 420    | 1024       | 148 | 169 | 425    |
| CVVM3 - 6225DA - (B) - Ratio  |         | 2.2   | 4   | 982      | 155 | 182 | 423    | 1045       | 155 | 182 | 430    |
| CVVM4 - 6225DA - (B) - Ratio  |         | 3.0   | 4   | 1005     | 166 | 222 | 433    | 1077       | 166 | 222 | 443    |
| CVVM5 - 6225DA - (B) - Ratio  |         | 3.7   | 4   | 1005     | 166 | 222 | 433    | 1077       | 166 | 222 | 443    |
| CVVM8 - 6225DA - (B) - Ratio  |         | 5.5   | 4   | 1049     | 166 | 222 | 440    | 1121       | 166 | 222 | 450    |
| CVVM10 - 6225DA - (B) - Ratio |         | 7.5   | 4   | 1072     | 211 | 251 | 455    | 1167       | 211 | 251 | 473    |
| CVVM15 - 6225DA - (B) - Ratio |         | 11    | 4   | 1132     | 211 | 251 | 469    | 1227       | 211 | 251 | 486    |
| CVVM20 - 6225DA - (B) - Ratio |         | 15    | 4   | 1222     | 261 | 324 | 521    | 1327       | 261 | 324 | 554    |
| CVVM5 - 6225DB - (B) - Ratio  |         | 3.7   | 4   | 1058     | 166 | 222 | 479    | 1130       | 166 | 222 | 490    |
| CVVM8 - 6225DB - (B) - Ratio  |         | 5.5   | 4   | 1102     | 166 | 222 | 486    | 1174       | 166 | 222 | 497    |
| CVVM10 - 6225DB - (B) - Ratio |         | 7.5   | 4   | 1125     | 211 | 251 | 501    | 1220       | 211 | 251 | 519    |
| CVVM15 - 6225DB - (B) - Ratio |         | 11    | 4   | 1185     | 211 | 251 | 515    | 1280       | 211 | 251 | 533    |
| CVVM20 - 6225DB - (B) - Ratio |         | 15    | 4   | 1265     | 261 | 324 | 569    | 1370       | 261 | 324 | 603    |
| CVVM25 - 6225DB - (B) - Ratio |         | 18.5  | 4   | 1360     | 340 | 394 | 661    | 1525       | 340 | 394 | 685    |
| CVVM30 - 6225DB - (B) - Ratio |         | 22    | 4   | 1360     | 340 | 394 | 661    | 1525       | 340 | 394 | 685    |
| CVVM40 - 6225DB - (B) - Ratio |         | 30    | 4   | 1360     | 340 | 394 | 678    | 1525       | 340 | 394 | 721    |

Note: 5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 6235DA to 6245DB

| Frame size | CF  | D1  | D2  | D3  | M   | E  | P  | N | d  | X   | Y   | Output Shaft <span>Note: 2, 3, 6</span> |     |    |    |    |     |    |
|------------|-----|-----|-----|-----|-----|----|----|---|----|-----|-----|-----------------------------------------|-----|----|----|----|-----|----|
|            |     |     |     |     |     |    |    |   |    |     |     | d1                                      | L1  | b1 | h1 | t1 | S1  | m1 |
| 6235DA     | 529 | 570 | 510 | 450 | 250 | 40 | 10 | 8 | 27 | 359 | 344 | 130                                     | 200 | 32 | 18 | 11 | M24 | 41 |
| 6235DB     | 551 | 570 | 510 | 450 | 250 | 40 | 10 | 8 | 27 | 359 | 344 | 130                                     | 200 | 32 | 18 | 11 | M24 | 41 |
| 6245DA     | 566 | 635 | 560 | 485 | 250 | 40 | 10 | 8 | 33 | 370 | 371 | 140                                     | 200 | 36 | 20 | 12 | M24 | 41 |
| 6245DB     | 587 | 635 | 560 | 485 | 250 | 40 | 10 | 8 | 33 | 370 | 371 | 140                                     | 200 | 36 | 20 | 12 | M24 | 41 |

| Model                         | Note: 5 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM3 - 6235DA - (B) - Ratio  |         | 2.2   | 4   | 1069     | 155 | 182 | 523    | 1131       | 155 | 182 | 529    |
| CVVM4 - 6235DA - (B) - Ratio  |         | 3.0   | 4   | 1091     | 166 | 222 | 532    | 1163       | 166 | 222 | 542    |
| CVVM5 - 6235DA - (B) - Ratio  |         | 3.7   | 4   | 1091     | 166 | 222 | 532    | 1163       | 166 | 222 | 542    |
| CVVM8 - 6235DA - (B) - Ratio  |         | 5.5   | 4   | 1135     | 166 | 222 | 539    | 1207       | 166 | 222 | 549    |
| CVVM10 - 6235DA - (B) - Ratio |         | 7.5   | 4   | 1163     | 211 | 251 | 555    | 1258       | 211 | 251 | 572    |
| CVVM15 - 6235DA - (B) - Ratio |         | 11    | 4   | 1223     | 211 | 251 | 569    | 1318       | 211 | 251 | 586    |
| CVVM20 - 6235DA - (B) - Ratio |         | 15    | 4   | 1309     | 261 | 324 | 622    | 1413       | 261 | 324 | 656    |
| CVVM25 - 6235DA - (B) - Ratio |         | 18.5  | 4   | 1403     | 340 | 394 | 698    | 1568       | 340 | 394 | 742    |
| CVVM30 - 6235DA - (B) - Ratio |         | 22    | 4   | 1403     | 340 | 394 | 698    | 1568       | 340 | 394 | 742    |
| CVVM15 - 6235DB - (B) - Ratio |         | 11    | 4   | 1245     | 211 | 251 | 601    | 1340       | 211 | 251 | 619    |
| CVVM20 - 6235DB - (B) - Ratio |         | 15    | 4   | 1330     | 261 | 324 | 663    | 1435       | 261 | 324 | 697    |
| CVVM25 - 6235DB - (B) - Ratio |         | 18.5  | 4   | 1425     | 340 | 394 | 730    | 1590       | 340 | 394 | 781    |
| CVVM30 - 6235DB - (B) - Ratio |         | 22    | 4   | 1425     | 340 | 394 | 730    | 1590       | 340 | 394 | 781    |
| CVVM40 - 6235DB - (B) - Ratio |         | 30    | 4   | 1425     | 340 | 394 | 744    | 1590       | 340 | 394 | 787    |
| CVVM50 - 6235DB - (B) - Ratio |         | 37    | 4   | 1540     | 340 | 394 | 792    | 1755       | 340 | 394 | 889    |
| CVVM3 - 6245DA - (B) - Ratio  |         | 2.2   | 4   | 1106     | 155 | 182 | 617    | 1169       | 155 | 182 | 623    |
| CVVM4 - 6245DA - (B) - Ratio  |         | 3.0   | 4   | 1129     | 166 | 222 | 626    | 1201       | 166 | 222 | 636    |
| CVVM5 - 6245DA - (B) - Ratio  |         | 3.7   | 4   | 1129     | 166 | 222 | 626    | 1201       | 166 | 222 | 636    |
| CVVM8 - 6245DA - (B) - Ratio  |         | 5.5   | 4   | 1173     | 166 | 222 | 633    | 1245       | 166 | 222 | 643    |
| CVVM10 - 6245DA - (B) - Ratio |         | 7.5   | 4   | 1201     | 211 | 251 | 649    | 1296       | 211 | 251 | 666    |
| CVVM15 - 6245DA - (B) - Ratio |         | 11    | 4   | 1261     | 211 | 251 | 663    | 1356       | 211 | 251 | 680    |
| CVVM20 - 6245DA - (B) - Ratio |         | 15    | 4   | 1346     | 261 | 324 | 716    | 1451       | 261 | 324 | 750    |
| CVVM25 - 6245DA - (B) - Ratio |         | 18.5  | 4   | 1441     | 340 | 394 | 792    | 1606       | 340 | 394 | 845    |
| CVVM30 - 6245DA - (B) - Ratio |         | 22    | 4   | 1441     | 340 | 394 | 792    | 1606       | 340 | 394 | 845    |
| CVVM15 - 6245DB - (B) - Ratio |         | 11    | 4   | 1282     | 211 | 251 | 690    | 1377       | 211 | 251 | 708    |
| CVVM20 - 6245DB - (B) - Ratio |         | 15    | 4   | 1367     | 261 | 324 | 750    | 1472       | 261 | 324 | 779    |
| CVVM25 - 6245DB - (B) - Ratio |         | 18.5  | 4   | 1462     | 340 | 394 | 816    | 1627       | 340 | 394 | 867    |
| CVVM30 - 6245DB - (B) - Ratio |         | 22    | 4   | 1462     | 340 | 394 | 816    | 1627       | 340 | 394 | 867    |
| CVVM40 - 6245DB - (B) - Ratio |         | 30    | 4   | 1462     | 340 | 394 | 833    | 1627       | 340 | 394 | 876    |
| CVVM50 - 6245DB - (B) - Ratio |         | 37    | 4   | 1577     | 340 | 394 | 881    | 1792       | 340 | 394 | 978    |

Note: 1. [ ] indicates motor capacity.

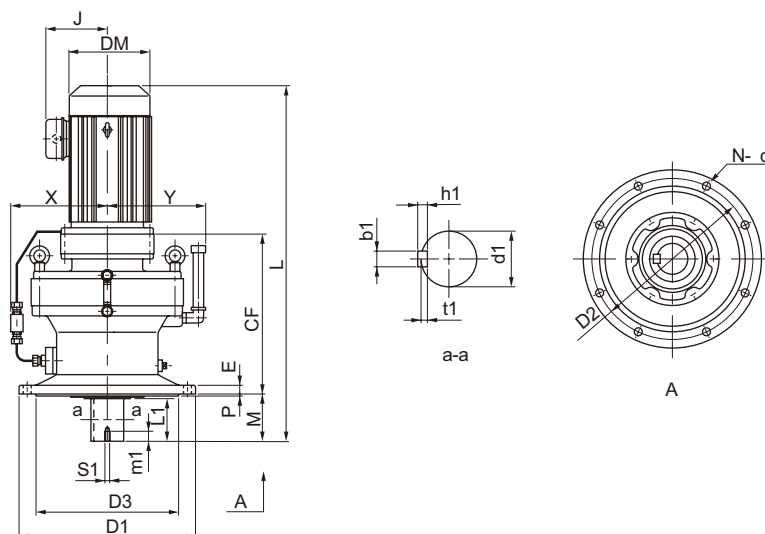
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."

4. Pilot diameter ( $\phi D3$ ): Dimension tolerance conforms to JIS B 0401-1976 "f8."

# Dimension Tables Gearmotors (Vertical, Slow Speed Shaft Down, V-Flange Mount)

CVVM<sup>Note: 1</sup> - 6255DA to 6275DA



| Frame size | CF  | D1   | D2   | D3  | M   | E  | P  | N | d  | X   | Y   | Output Shaft <span>Note: 2, 3, 6</span> |     |    |    |    |     |    |
|------------|-----|------|------|-----|-----|----|----|---|----|-----|-----|-----------------------------------------|-----|----|----|----|-----|----|
|            |     |      |      |     |     |    |    |   |    |     |     | d1                                      | L1  | b1 | h1 | t1 | S1  | m1 |
| 6255DA     | 661 | 685  | 610  | 535 | 295 | 45 | 10 | 8 | 33 | 395 | 399 | 160                                     | 240 | 40 | 22 | 13 | M30 | 49 |
| 6255DB     | 684 | 685  | 610  | 535 | 295 | 45 | 10 | 8 | 33 | 395 | 399 | 160                                     | 240 | 40 | 22 | 13 | M30 | 49 |
| 6265DA     | 728 | 750  | 660  | 570 | 360 | 50 | 10 | 8 | 39 | 427 | 431 | 170                                     | 300 | 40 | 22 | 13 | M30 | 49 |
| 6275DA     | 994 | 1160 | 1020 | 900 | 355 | 60 | 10 | 8 | 39 | 610 | 613 | 180                                     | 320 | 45 | 25 | 15 | M30 | 52 |

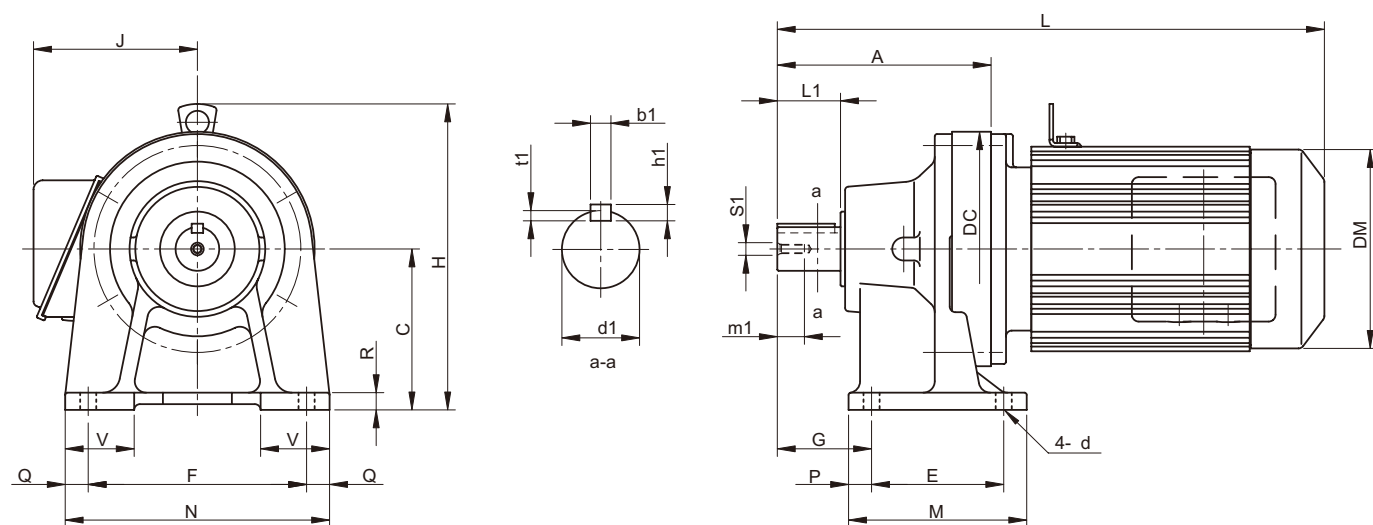
| Model                         | Note: 5 | Motor |     | Standard |     |     |        | With Brake |     |     |        |
|-------------------------------|---------|-------|-----|----------|-----|-----|--------|------------|-----|-----|--------|
|                               |         | [kW]  | [P] | L        | J   | DM  | W [kg] | L          | J   | DM  | W [kg] |
| CVVM5 - 6255DA - (B) - Ratio  |         | 3.7   | 4   | 1284     | 166 | 222 | 947    | 1356       | 166 | 222 | 957    |
| CVVM8 - 6255DA - (B) - Ratio  |         | 5.5   | 4   | 1328     | 166 | 222 | 954    | 1400       | 166 | 222 | 964    |
| CVVM10 - 6255DA - (B) - Ratio |         | 7.5   | 4   | 1346     | 211 | 251 | 969    | 1441       | 211 | 251 | 984    |
| CVVM15 - 6255DA - (B) - Ratio |         | 11    | 4   | 1406     | 211 | 251 | 983    | 1501       | 211 | 251 | 998    |
| CVVM20 - 6255DA - (B) - Ratio |         | 15    | 4   | 1486     | 261 | 324 | 1041   | 1591       | 261 | 324 | 1077   |
| CVVM25 - 6255DA - (B) - Ratio |         | 18.5  | 4   | 1581     | 340 | 394 | 1110   | 1746       | 340 | 394 | 1161   |
| CVVM30 - 6255DA - (B) - Ratio |         | 22    | 4   | 1581     | 340 | 394 | 1110   | 1746       | 340 | 394 | 1161   |
| CVVM40 - 6255DA - (B) - Ratio |         | 30    | 4   | 1581     | 340 | 394 | 1129   | 1746       | 340 | 394 | 1172   |
| CVVM15 - 6255DB - (B) - Ratio |         | 11    | 4   | 1443     | 211 | 251 | 1059   | 1538       | 211 | 251 | 1074   |
| CVVM20 - 6255DB - (B) - Ratio |         | 15    | 4   | 1508     | 261 | 324 | 1109   | 1613       | 261 | 324 | 1143   |
| CVVM25 - 6255DB - (B) - Ratio |         | 18.5  | 4   | 1603     | 340 | 394 | 1185   | 1768       | 340 | 394 | 1236   |
| CVVM30 - 6255DB - (B) - Ratio |         | 22    | 4   | 1603     | 340 | 394 | 1185   | 1768       | 340 | 394 | 1236   |
| CVVM40 - 6255DB - (B) - Ratio |         | 30    | 4   | 1603     | 340 | 394 | 1200   | 1768       | 340 | 394 | 1243   |
| CVVM50 - 6255DB - (B) - Ratio |         | 37    | 4   | 1718     | 340 | 394 | 1238   | 1928       | 340 | 394 | 1335   |
| CVVM60 - 6255DB - (B) - Ratio |         | 45    | 4   | 1718     | 340 | 394 | 1238   | 1928       | 340 | 394 | 1335   |
| CVVM8 - 6265DA - (B) - Ratio  |         | 5.5   | 4   | 1480     | 166 | 222 | 1296   | 1552       | 166 | 222 | 1306   |
| CVVM10 - 6265DA - (B) - Ratio |         | 7.5   | 4   | 1493     | 211 | 251 | 1309   | 1588       | 211 | 251 | 1329   |
| CVVM15 - 6265DA - (B) - Ratio |         | 11    | 4   | 1553     | 211 | 251 | 1326   | 1648       | 211 | 251 | 1341   |
| CVVM20 - 6265DA - (B) - Ratio |         | 15    | 4   | 1618     | 261 | 324 | 1376   | 1723       | 261 | 324 | 1412   |
| CVVM25 - 6265DA - (B) - Ratio |         | 18.5  | 4   | 1713     | 340 | 394 | 1455   | 1878       | 340 | 394 | 1500   |
| CVVM30 - 6265DA - (B) - Ratio |         | 22    | 4   | 1713     | 340 | 394 | 1455   | 1878       | 340 | 394 | 1500   |
| CVVM40 - 6265DA - (B) - Ratio |         | 30    | 4   | 1713     | 340 | 394 | 1470   | 1878       | 340 | 394 | 1513   |
| CVVM50 - 6265DA - (B) - Ratio |         | 37    | 4   | 1828     | 340 | 394 | 1505   | 2043       | 340 | 394 | 1598   |
| CVVM60 - 6265DA - (B) - Ratio |         | 45    | 4   | 1828     | 340 | 394 | 1505   | 2043       | 340 | 394 | 1598   |
| CVVM10 - 6275DA - (B) - Ratio |         | 7.5   | 4   | 1754     | 211 | 251 | 2694   | 1849       | 211 | 251 | 2714   |
| CVVM15 - 6275DA - (B) - Ratio |         | 11    | 4   | 1814     | 211 | 251 | 2708   | 1909       | 211 | 251 | 2723   |
| CVVM20 - 6275DA - (B) - Ratio |         | 15    | 4   | 1879     | 261 | 324 | 2761   | 1984       | 261 | 324 | 2797   |
| CVVM25 - 6275DA - (B) - Ratio |         | 18.5  | 4   | 1974     | 340 | 394 | 2840   | 2139       | 340 | 394 | 2885   |
| CVVM30 - 6275DA - (B) - Ratio |         | 22    | 4   | 1974     | 340 | 394 | 2840   | 2139       | 340 | 394 | 2885   |
| CVVM40 - 6275DA - (B) - Ratio |         | 30    | 4   | 1974     | 340 | 394 | 2855   | 2139       | 340 | 394 | 2898   |
| CVVM50 - 6275DA - (B) - Ratio |         | 37    | 4   | 2089     | 340 | 394 | 2890   | 2304       | 340 | 394 | 2983   |
| CVVM60 - 6275DA - (B) - Ratio |         | 45    | 4   | 2089     | 340 | 394 | 2890   | 2304       | 340 | 394 | 2983   |

Note: 5. "B" after the frame size indicates models equipped with brake.

6. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

7. Dimensions in above drawings are subject to change without notice.

## Dimension Tables Gearmotors (Universal Direction, Foot-Mount)

CNHM<sup>Note: 1</sup> - 610H, 612H (Center Height Option)

| Frame size | A   | C   | DC  | E   | F   | G  | M   | N   | P  | Q  | R  | V  | d  | Output Shaft |    |    |   |   |    |    | Note: 2, 3, 5 |
|------------|-----|-----|-----|-----|-----|----|-----|-----|----|----|----|----|----|--------------|----|----|---|---|----|----|---------------|
|            | d1  | L1  | b1  | h1  | t1  | S1 | m1  |     |    |    |    |    |    |              |    |    |   |   |    |    |               |
| 610H       | 156 | 120 | 150 | 90  | 150 | 60 | 135 | 180 | 15 | 15 | 12 | 40 | 11 | 28           | 35 | 8  | 7 | 4 | M8 | 20 |               |
| 612H       | 186 | 140 | 204 | 115 | 190 | 82 | 155 | 230 | 20 | 20 | 15 | 60 | 14 | 38           | 55 | 10 | 8 | 5 | M8 | 20 |               |

| Model                       | Note: 4 | Motor |     | Standard |     |     |     |        |  | With Brake |     |     |     |        |  |
|-----------------------------|---------|-------|-----|----------|-----|-----|-----|--------|--|------------|-----|-----|-----|--------|--|
|                             |         | [kW]  | [P] | L        | H   | J   | DM  | W [kg] |  | L          | H   | J   | DM  | W [kg] |  |
| CNHM02 - 610H - (B) - Ratio |         | 0.2   | 4   | 336      | 207 | 113 | 124 | 19     |  | 364        | 207 | 113 | 124 | 21     |  |
| CNHM03 - 610H - (B) - Ratio |         | 0.25  | 4   | 336      | 207 | 113 | 124 | 19     |  | 364        | 207 | 113 | 124 | 21     |  |
| CNHM05 - 610H - (B) - Ratio |         | 0.4   | 4   | 352      | 207 | 113 | 124 | 20     |  | 384        | 207 | 113 | 124 | 22     |  |
| CNHM08 - 610H - (B) - Ratio |         | 0.55  | 4   | 393      | 213 | 143 | 160 | 24     |  | 436        | 213 | 143 | 160 | 27     |  |
| CNHM1 - 610H - (B) - Ratio  |         | 0.75  | 4   | 393      | 213 | 143 | 160 | 24     |  | 436        | 213 | 143 | 160 | 27     |  |
| CNHM1H - 610H - (B) - Ratio |         | 1.1   | 4   | 426      | 220 | 148 | 169 | 28     |  | 488        | 220 | 148 | 169 | 33     |  |
| CNHM2 - 610H - (B) - Ratio  |         | 1.5   | 4   | 426      | 220 | 148 | 169 | 28     |  | 488        | 220 | 148 | 169 | 33     |  |
| CNHM3 - 610H - (B) - Ratio  |         | 2.2   | 4   | 446      | 226 | 155 | 182 | 32     |  | 509        | 226 | 155 | 182 | 38     |  |
| CNHM05 - 612H - (B) - Ratio |         | 0.4   | 4   | 387      | 257 | 113 | 124 | 31     |  | 419        | 257 | 113 | 124 | 33     |  |
| CNHM08 - 612H - (B) - Ratio |         | 0.55  | 4   | 423      | 233 | 143 | 160 | 33     |  | 466        | 233 | 143 | 160 | 36     |  |
| CNHM1 - 612H - (B) - Ratio  |         | 0.75  | 4   | 423      | 233 | 143 | 160 | 33     |  | 466        | 233 | 143 | 160 | 36     |  |
| CNHM1H - 612H - (B) - Ratio |         | 1.1   | 4   | 456      | 240 | 148 | 169 | 37     |  | 518        | 240 | 148 | 169 | 42     |  |
| CNHM2 - 612H - (B) - Ratio  |         | 1.5   | 4   | 456      | 240 | 148 | 169 | 37     |  | 518        | 240 | 148 | 169 | 42     |  |
| CNHM3 - 612H - (B) - Ratio  |         | 2.2   | 4   | 476      | 246 | 155 | 182 | 51     |  | 539        | 246 | 155 | 182 | 48     |  |
| CNHM4 - 612H - (B) - Ratio  |         | 3.0   | 4   | 499      | 266 | 166 | 222 | 51     |  | 571        | 266 | 166 | 222 | 61     |  |
| CNHM5 - 612H - (B) - Ratio  |         | 3.7   | 4   | 499      | 266 | 166 | 222 | 51     |  | 571        | 266 | 166 | 222 | 61     |  |
| CNHM8 - 612H - (B) - Ratio  |         | 5.5   | 4   | 543      | 266 | 166 | 222 | 58     |  | 615        | 266 | 166 | 222 | 68     |  |

Note: 1. [ ] indicates motor capacity.

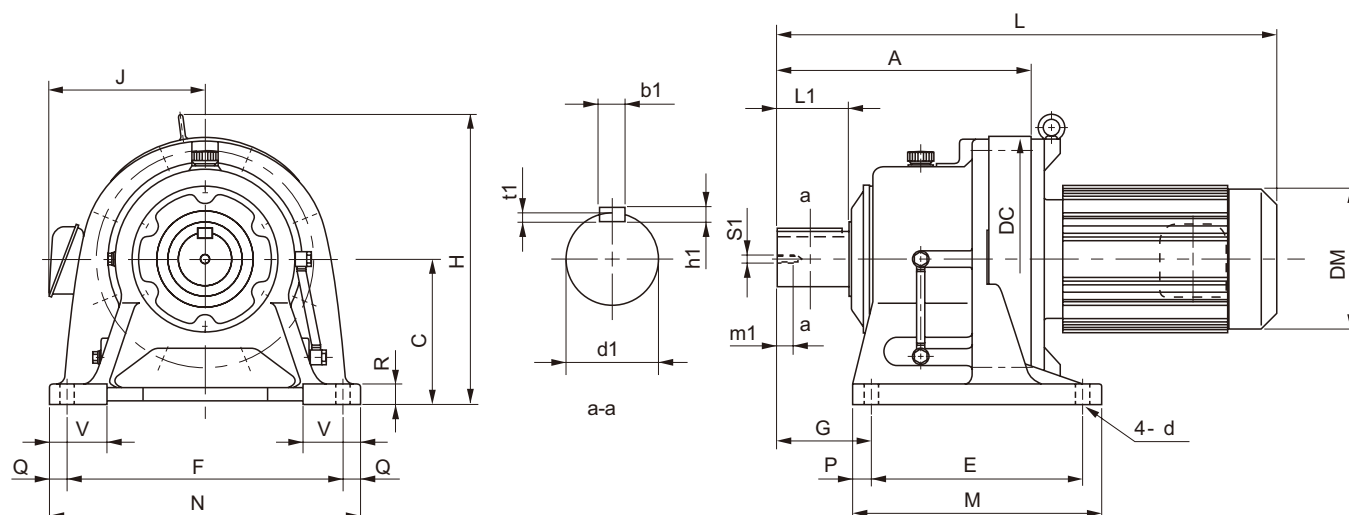
2. Dimension of shaft end diameter: Dimension tolerance conforms to JIS B 0401-1976 "h6."

3. Dimension of shaft end key: Dimension tolerance conforms to JIS B 1301-1996 "Parallel Key."



# Dimension Tables Gearmotors (Horizontal Direction, Foot-Mount)

## CHHM<sup>Note: 1</sup> - 614H, 616H (Center Height Option)



GEARMOTORS

Dimension Tables  
Center Height Option

| Frame size | A   | C   | DC  | E   | F   | G   | M   | N   | P  | Q  | R  | V  | d  | Output Shaft |    |    |    |     |     |    | Note: 2, 3, 5 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|--------------|----|----|----|-----|-----|----|---------------|
|            | d1  | L1  | b1  | h1  | t1  | S1  | m1  |     |    |    |    |    |    |              |    |    |    |     |     |    |               |
| 614H       | 260 | 160 | 230 | 145 | 290 | 120 | 195 | 330 | 25 | 20 | 22 | 65 | 18 | 50           | 90 | 14 | 9  | 5.5 | M10 | 18 |               |
| 616H       | 308 | 200 | 300 | 150 | 370 | 139 | 238 | 410 | 44 | 20 | 25 | 75 | 18 | 60           | 90 | 18 | 11 | 7   | M10 | 18 |               |

| Model                        | Note: 4 | Motor |     | Standard |     |     |     |        | With Brake |     |     |     |        |
|------------------------------|---------|-------|-----|----------|-----|-----|-----|--------|------------|-----|-----|-----|--------|
|                              |         | [kW]  | [P] | L        | H   | J   | DM  | W [kg] | L          | H   | J   | DM  | W [kg] |
| CHHM1 - 614H - (B) - Ratio   |         | 0.75  | 4   | 497      | 268 | 143 | 160 | 52     | 540        | 268 | 143 | 160 | 57     |
| CHHM1H - 614H - (B) - Ratio  |         | 1.1   | 4   | 530      | 268 | 148 | 169 | 58     | 592        | 268 | 148 | 169 | 63     |
| CHHM2 - 614H - (B) - Ratio   |         | 1.5   | 4   | 530      | 268 | 148 | 169 | 58     | 592        | 268 | 148 | 169 | 63     |
| CHHM3 - 614H - (B) - Ratio   |         | 2.2   | 4   | 550      | 274 | 155 | 182 | 61     | 613        | 274 | 155 | 182 | 68     |
| CHHM4 - 614H - (B) - Ratio   |         | 3.0   | 4   | 573      | 296 | 166 | 222 | 71     | 645        | 296 | 166 | 222 | 81     |
| CHHM5 - 614H - (B) - Ratio   |         | 3.7   | 4   | 573      | 296 | 166 | 222 | 71     | 645        | 296 | 166 | 222 | 81     |
| CHHM8 - 614H - (B) - Ratio   |         | 5.5   | 4   | 617      | 296 | 166 | 222 | 78     | 689        | 296 | 166 | 222 | 88     |
| CHHM10 - 614H - (B) - Ratio  |         | 7.5   | 4   | 640      | 323 | 211 | 251 | 93     | 735        | 323 | 211 | 251 | 111    |
| CHHM15 - 614H - (B) - Ratio  |         | 11    | 4   | 700      | 323 | 211 | 251 | 107    | 795        | 323 | 211 | 251 | 125    |
| *CHHM20 - 614H - (B) - Ratio |         | 15    | 4   | 790      | 358 | 261 | 324 | 159    | 895        | 321 | 261 | 324 | 193    |
| CHHM1H - 616H - (B) - Ratio  |         | 1.1   | 4   | 583      | 310 | 148 | 169 | 99     | 645        | 310 | 148 | 169 | 104    |
| CHHM2 - 616H - (B) - Ratio   |         | 1.5   | 4   | 583      | 310 | 148 | 169 | 99     | 645        | 310 | 148 | 169 | 104    |
| CHHM3 - 616H - (B) - Ratio   |         | 2.2   | 4   | 598      | 310 | 155 | 182 | 102    | 661        | 310 | 155 | 182 | 108    |
| CHHM4 - 616H - (B) - Ratio   |         | 3.0   | 4   | 621      | 310 | 166 | 222 | 111    | 693        | 310 | 166 | 222 | 121    |
| CHHM5 - 616H - (B) - Ratio   |         | 3.7   | 4   | 621      | 310 | 166 | 222 | 111    | 693        | 310 | 166 | 222 | 121    |
| CHHM8 - 616H - (B) - Ratio   |         | 5.5   | 4   | 665      | 310 | 166 | 222 | 118    | 737        | 310 | 166 | 222 | 128    |
| CHHM10 - 616H - (B) - Ratio  |         | 7.5   | 4   | 693      | 333 | 211 | 251 | 134    | 788        | 333 | 211 | 251 | 151    |
| CHHM15 - 616H - (B) - Ratio  |         | 11    | 4   | 753      | 333 | 211 | 251 | 148    | 848        | 333 | 211 | 251 | 165    |
| CHHM20 - 616H - (B) - Ratio  |         | 15    | 4   | 838      | 368 | 261 | 324 | 201    | 943        | 368 | 261 | 324 | 235    |
| CHHM25 - 616H - (B) - Ratio  |         | 18.5  | 4   | 933      | 368 | 340 | 394 | 277    | 1098       | 368 | 340 | 394 | 328    |
| CHHM30 - 616H - (B) - Ratio  |         | 22    | 4   | 933      | 368 | 340 | 394 | 277    | 1098       | 368 | 340 | 394 | 328    |

\*\*\* indicates models with bottom level of the motor lower than the reducer base.

Note: 4. "B" after the frame size indicates models equipped with brake.

5. Dimension of shaft end: Refer to pages F-28 to F-29 for details.

6. Dimensions in above drawings are subject to change without notice.

|   |   |   |   |
|---|---|---|---|
| M | E | M | O |
|---|---|---|---|