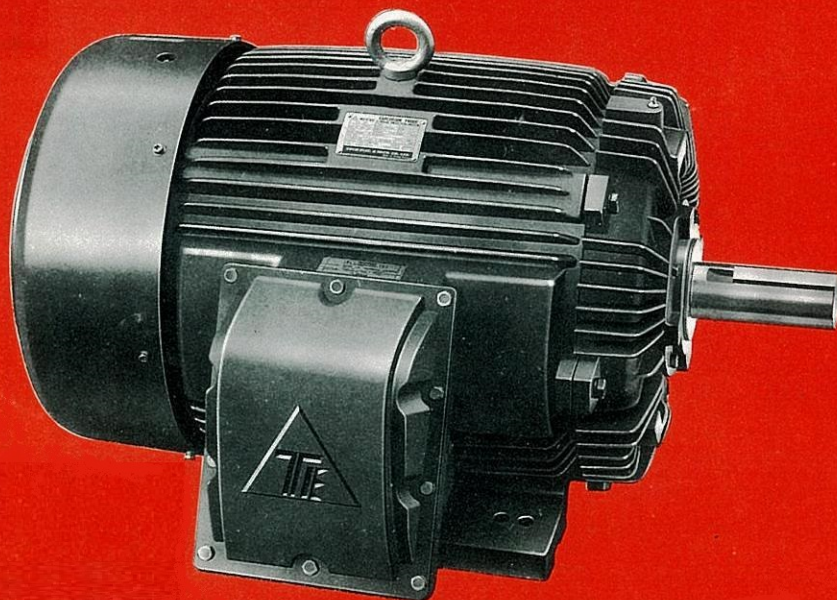


# TECO<sup>®</sup> INDUCTION MOTORS

**EXPLOSION-PROOF**   
UNDERWRITERS LABORATORIES INC. LISTED  
HAZARDOUS LOCATIONS

Class I: Group D  
Class II: Groups E, F, & G  
IEC Frames 90S-280M  
3/4 HP through 150 HP



## PREMIUM FEATURES

- Rugged Cast-Iron Construction
- Oversized Cast-Iron Conduit Box
- Oversized Vacuum Degassed Bearings
- Stainless Steel Nameplate and UL Dual Class Label
- Non-sparking Fan and Dust Slings
- Low Temperature Rise
- Energy Efficient and High Power Factor

## Explosion-proof, Type AEEDXU

Class I-Group D and Class II-Groups E, F, G

NEMA Design B, Class B & F Insulation \*

40°C Ambient Temperature, Continuous Duty,

1.0 Service Factor for Frames 90S-225M, 1.15 Service Factor for Frames 250S-280M,  
(Other Voltages and Cycles are Available on Request)

(220V/3 $\phi$ /60HZ)

HP	Full Load RPM	Frame No.	Full Load				Locked Rotor		Break-down Torque %FLT	Rotor GD <sup>2</sup> Kg-M <sup>2</sup>
			Torque Kg-M	Eff. %	P.F. %	Current Amps	Torque %FLT	Current Amps		
¼	1150	90S	0.47	71.0	58.5	3.54	175	26	275	0.014
	1745	90S	0.43	76.5	72.0	3.55	275	31	300	0.011
	1160	90L	0.64	71.0	58.5	4.71	170	31	265	0.018
1	3480	90S	0.32	80.0	84.5	4.34	175	42	250	0.008
	1735	90L	0.64	75.0	78.0	4.95	250	42	280	0.014
	1150	112S	0.96	73.0	79.0	5.09	165	42	250	0.034
1½	3460	90L	0.43	79.5	90.5	5.44	170	52	240	0.011
	1715	90L	0.84	78.0	81.5	6.16	235	52	270	0.018
	1160	112M	1.27	78.0	75.5	6.65	160	52	240	0.051
2	3420	112S	0.64	77.5	92.0	8.24	160	67	230	0.021
	1755	112S	1.26	82.5	80.0	8.90	215	67	250	0.037
	1170	132S	1.87	80.5	72.5	10.1	155	67	230	0.061
3	3450	112M	1.05	82.5	92.5	12.8	150	96	215	0.040
	1175	112M	2.09	84.0	86.5	13.5	185	96	225	0.067
	1160	132M	3.14	84.0	78.5	14.8	150	96	215	0.156
5	3470	132S	1.58	84.0	89.5	19.5	140	133	200	0.047
	1745	132S	3.13	86.0	88.0	19.4	175	133	215	0.117
	1165	160M	4.72	85.0	84.0	20.6	150	133	205	0.289
7½	3470	132M	2.12	85.0	91.5	25.2	135	169	200	0.064
	1740	132M	4.20	85.5	90.5	25.3	165	169	200	0.161
	1170	160L	6.27	86.5	85.0	26.6	150	169	200	0.431
10	3530	160M	3.13	85.5	92.0	37.3	130	243	200	0.167
	1760	160M	6.27	88.0	90.0	37.1	160	243	200	0.329
	1165	180M	9.42	87.5	86.5	38.8	140	243	200	0.693
15	3520	160L	4.16	87.5	93.0	48.1	130	303	200	0.220
	1755	160L	8.31	88.5	90.5	48.9	150	303	200	0.414
	1175	180L	12.47	89.5	86.5	50.6	135	303	200	1.275
20	3520	180MA	5.26	88.5	91.5	60.4	130	382	200	0.270
	1760	180M	10.39	90.0	88.0	61.8	150	382	200	0.633
	1175	200M	15.51	89.5	84.0	65.1	135	382	200	1.470
25	3530	180LA	6.23	90.0	92.0	70.9	130	455	200	0.355
	1750	180L	12.47	90.5	90.0	72.1	150	455	200	0.777
	1170	200L	18.70	90.5	84.5	76.8	135	455	200	1.993
30	3550	200MA	8.45	88.5	90.0	98.3	125	606	200	0.507
	1760	200M	16.62	90.5	90.0	96.1	140	606	200	1.132
	1185	225S	24.93	91.0	85.0	101.2	135	606	200	2.635
40	3550	200LA	10.53	88.0	90.0	123.6	120	758	200	0.584
	1760	200L	20.64	91.5	90.0	118.9	140	758	200	1.343
	1180	225M	31.02	90.5	86.5	125.0	135	758	200	3.030
50	875	250SC	41.50	92.4	80.0	133.0	150	758	220	4.700
	3530	225SA	12.33	89.5	91.5	143.4	120	910	200	0.921
	1765	225S	24.79	92.0	87.5	145.9	140	910	200	1.824
60	1170	250SC	37.20	93.0	84.0	151.0	150	909	220	4.200
	875	250MC	49.70	92.4	80.0	159.0	150	909	220	5.640
	3540	225MA	15.37	89.5	93.0	176.4	105	1134	200	1.360
75	1775	225M	31.02	92.5	87.0	182.5	140	1134	200	2.480
	1170	250MC	46.40	93.0	84.0	188.0	150	1135	220	4.980
	880	280SC	61.80	93.0	81.5	194.0	150	1135	220	9.500
100	3550	250MA	20.40	93.0	90.2	233.0	105	1515	220	1.720
	1770	250MC	40.90	93.0	88.5	238.0	150	1515	220	4.430
	1175	280SC	61.80	93.0	85.5	246.0	150	1515	220	8.830
125	880	280MC	82.40	93.0	82.5	255.0	150	1515	220	10.800
	3555	280SA	25.50	93.0	91.0	289.0	100	1897	220	2.870
	1775	280SC	51.10	93.6	88.5	295.0	140	1897	220	6.540
150	1175	280MC	77.10	93.6	85.5	306.0	150	1897	220	11.000
	3555	280MA	30.50	93.0	91.7	—	100	2270	220	3.400
	1775	280MC	61.20	93.6	88.5	—	140	2270	220	7.760

\* Class B Insulation is standard for frames 90S-225M and Class F for frames 250S-280M

Note:

1. The above are typical values based on test.
2. Actual load & full voltage starting: According to ANSI/IEEE standard 112-1978 method B
3. 150HP is for 380V & above only.
4. Data subject to change without notice.



# PERFORMANCE DATA

**Explosion-proof, Type AEEDXU**  
**Class I-Group D and Class II-Groups E, F, G**  
**NEMA Design B, Class B & F Insulation \***  
**40°C Ambient Temperature, Continuous Duty, 1.0 Service Factor**  
**(Other Voltages and Cycles are Available on Request)**

(400V/3 $\phi$ /50Hz)

HP	Full Load RPM	Frame No.	Full Load				Locked Rotor		Break-down Torque %FLT	Rotor GD <sup>2</sup> Kg-M <sup>2</sup>
			Torque Kg-M	Eff. %	P.F. %	Current Amps	Torque %FLT	Current Amps		
¾	950	90S	0.57	68.0	58.5	2.03	175	19	275	0.014
	1440	90S	0.51	75.5	71.5	1.99	275	19	300	0.011
1	950	90L	0.76	68.0	58.5	2.71	170	19	265	0.018
	2870	90S	0.39	79.0	84.5	2.42	175	26	250	0.008
1½	1425	90L	0.76	72.5	76.0	2.93	250	26	280	0.014
	950	112S	1.15	75.0	79.0	2.73	165	26	250	0.034
	2850	90L	0.51	78.5	90.0	3.05	170	32	240	0.011
2	1425	90L	1.01	75.0	80.5	3.57	235	32	270	0.018
	965	112M	1.52	78.0	72.5	3.81	160	32	240	0.051
	2850	112S	0.76	79.0	92.0	4.44	160	41	230	0.021
3	1450	112S	1.52	81.0	79.5	5.02	215	41	250	0.037
	965	132S	2.24	80.0	71.0	5.69	155	41	230	0.061
	2850	112M	1.26	82.5	92.5	7.05	150	58	215	0.040
5	1440	112M	2.51	82.5	82.0	7.96	185	58	225	0.067
	950	132M	3.77	82.0	78.5	8.36	150	58	215	0.156
	2900	132S	1.90	85.5	88.0	10.7	140	80	200	0.047
7½	1450	132S	3.75	85.5	87.5	10.8	175	80	215	0.117
	965	160M	5.66	85.0	84.0	11.3	150	80	205	0.289
	2880	132M	2.55	86.5	91.5	13.6	135	102	200	0.064
10	1440	132M	5.04	86.0	89.0	14.1	165	102	200	0.161
	965	160L	7.53	86.5	85.0	14.6	150	102	200	0.431
	2925	160M	3.75	88.5	92.0	19.8	130	146	200	0.167
15	1460	160M	7.53	88.0	90.0	20.4	160	146	200	0.329
	965	180M	11.30	86.0	86.5	21.7	140	146	200	0.693
	2920	160L	4.99	88.5	93.0	26.2	130	184	200	0.220
20	1460	160L	9.97	88.5	90.5	26.9	150	184	200	0.414
	970	180L	14.96	88.0	86.5	28.3	135	184	200	1.275
	2925	180MA	6.32	89.0	90.5	33.4	130	231	200	0.270
25	1460	180M	12.47	90.0	87.0	34.4	150	231	200	0.633
	970	200M	18.61	89.0	84.0	36.0	135	231	200	1.470
	2940	180LA	7.48	90.5	91.0	39.2	130	275	200	0.355
30	1460	180L	14.96	90.5	90.0	39.7	150	275	200	0.777
	975	200L	22.44	89.5	84.5	42.7	135	275	200	1.993
	2960	200MA	10.14	89.5	88.5	54.4	125	368	200	0.507
40	1465	200M	19.94	91.0	90.0	52.6	140	368	200	1.132
	980	225S	29.92	91.0	83.0	57.0	135	368	200	2.635
	2955	200LA	12.63	90.0	90.0	66.5	120	458	200	0.584
50	1465	200L	24.76	91.0	90.0	65.7	140	458	200	1.343
	980	225M	37.23	91.5	86.5	68.0	135	458	200	3.030
	725	250MC	50.10	91.7	78.5	74.8	150	458	200	5.170
	2960	225SA	14.79	90.5	91.0	78.4	120	549	200	0.921
60	1465	225S	29.75	91.5	86.0	82.1	140	549	200	1.824
	980	250SC	44.50	93.0	82.5	84.2	150	549	200	4.620
	725	280SC	60.10	91.7	78.5	89.7	150	549	200	9.470
	2960	225MA	18.45	91.5	91.0	97.0	105	686	200	1.360
75	1465	225M	37.23	92.5	85.5	102.1	140	686	200	2.483
	980	250MC	55.60	93.0	82.5	105	150	686	220	5.540
	725	280MC	75.20	92.4	80.0	109	150	686	200	11.400
	2955	250MA	24.60	93.0	89.5	129	105	917	220	1.720
100	1480	250MC	49.10	93.0	87.5	132	125	917	220	4.440
	985	280SC	73.80	93.0	84.0	138	125	917	220	8.840
	2955	280SA	30.70	93.0	90.2	160	100	1147	220	2.870
125	1475	280SC	61.60	93.6	87.5	164	140	1147	220	6.540
	985	280MC	92.20	93.6	84.0	171	125	1147	220	11.100
	2960	280MA	36.80	93.0	91.0	191	100	1370	220	3.400
150	1476	280MC	73.90	93.6	87.5	197	140	1370	220	8.240

\* Class B Insulation is standard for frames 90S-225M and Class F for frames 250S-280M

Note:

1. The above are typical values based on test.
2. Actual load & full voltage starting: According to ANSI/IEEE standard 112-1978 method B
3. 150HP is for 380V & above only.
4. Data subject to change without notice.

## Explosion-Proof Totally-Enclosed Fan-Cooled Horizontal Fo

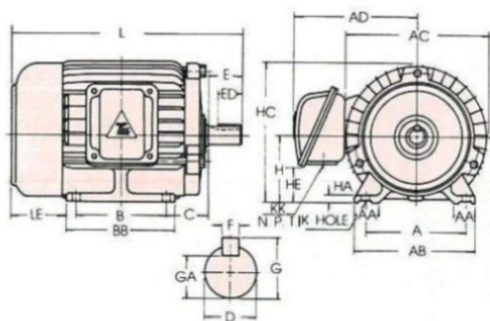


Fig-1

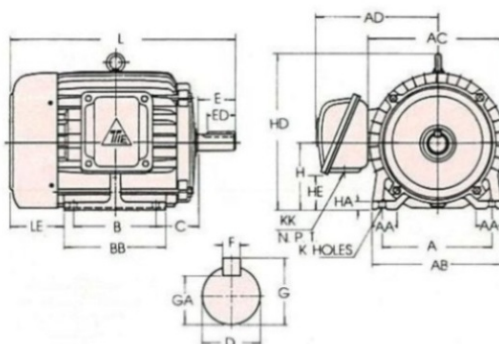


Fig-2

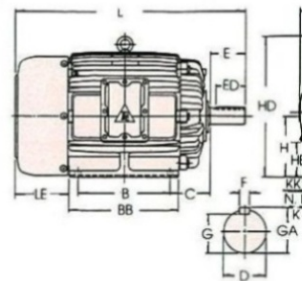


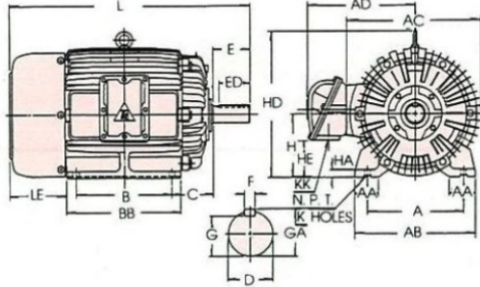
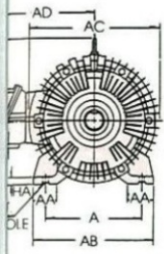
Fig-3

Output (HP)				Frame Nos. (EX)	Fig. No.	A	AA	AB	AC	AD	AE	B	BA	BB	C	H
2P	4P	6P	8P													
1½	1	¾	—	90S	1	140	35.5	170	200	204	145	100	—	130	56	90
2	1½, 2	1	—	90L		140	35.5	170	200	204	145	125	—	150	56	90
3	3	1½	—	112S	2	190	45.0	224	238	223	164	114	—	150	70	112
5	5	2	—	112M		190	45.0	224	238	223	164	140	—	175	70	112
7½	7½	3	—	132S	2	216	45.0	250	273	273	189	140	—	175	89	132
10	10	5	—	132M		216	45.0	250	273	273	189	178	—	212	89	132
15	15	7½	—	160M	3	254	50	300	334	311	227	210	—	250	108	160
20	20	10	—	160L		254	50	300	334	311	227	254	—	300	108	160
25	—	—	—	180MA	4	279	75	355	382	336	252	241	—	297	121	180
—	25	15	—	180MC	3	279	75	355	382	336	252	241	—	297	121	180
30	—	—	—	180LA	4	279	75	355	382	336	252	279	—	335	121	180
—	30	20	—	180LC	3	279	75	355	382	336	252	279	—	335	121	180
40	—	—	—	200MA	4	318	80	355	420	405	297	267	—	325	133	200
—	40	25	—	200MC		318	80	400	420	405	297	267	—	325	133	200
50	—	—	—	200LA	4	318	80	400	420	405	297	305	—	365	133	200
—	50	30	—	200LC		318	80	400	420	405	297	305	—	365	133	200
60	—	—	—	225SA	4	356	90	450	458	425	317	286	—	375	149	225
—	60	40	—	225SC		356	90	450	458	425	317	286	—	375	149	225
75	—	—	—	225MA	4	356	90	450	458	425	317	311	—	375	149	225
—	75	50	—	225MC		356	90	450	458	425	317	311	—	375	149	225
—	—	60	50	250SC	5	406	100	500	523	520	392	311	95	385	168	250
100	—	—	—	250MA		406	100	500	523	520	392	349	95	425	168	250
—	100	75	60	250MC	5	406	100	500	523	520	392	349	95	425	168	250
125	—	—	—	280SA		457	110	560	584	550	422	368	110	445	190	280
—	125	100	75	280SC	5	457	110	560	584	550	422	368	110	445	190	280
150	—	—	—	280MA		457	110	560	584	550	422	419	110	495	190	280
—	150	125	100	280MC	5	457	110	560	584	550	422	419	110	495	190	280

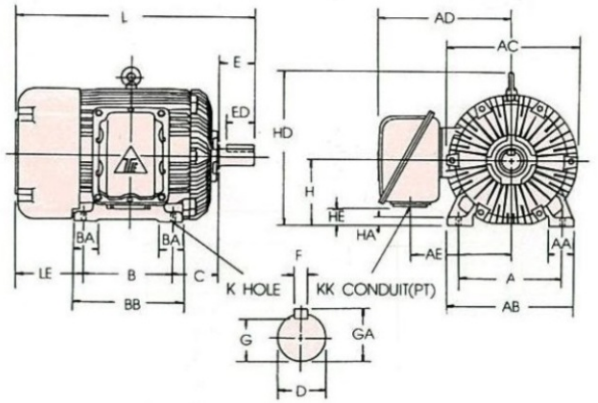
Note:

1. Tolerance of shaft end diameter D: Under  $\phi 28J6$ ,  $\phi 38\text{--}\phi 48K6$ , Above  $\phi 55:m6$ .
2. Tolerance of shaft center height H: Under 250: +0, -0.5 Above 280: +0, -1.
3. Cable hole KK in N.P.T. threaded dimension in inches.

# Foot-Mounted, Type AEEDXU



**Fig-4**

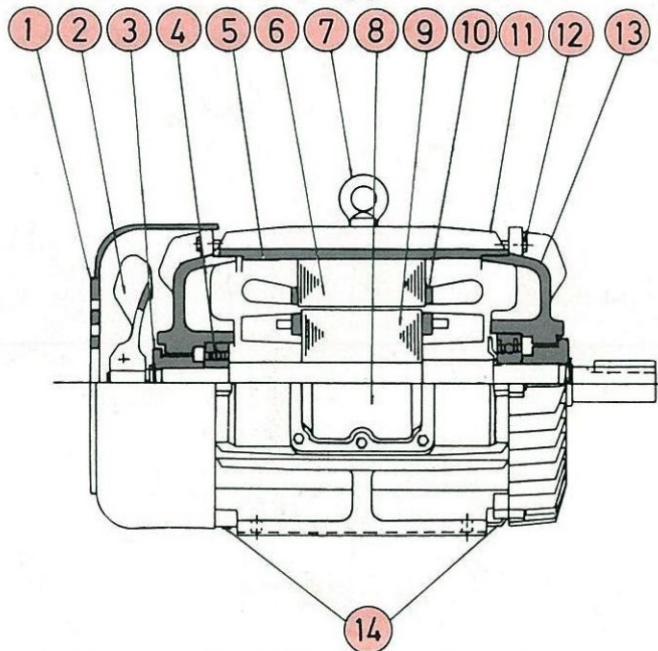


**Fig-5**

Dimensions in mm

HA	HC	HD	HE	K	KK	L	LE	Shaft Extension						Bearings		Approx. Weight KGS
								D	E	ED	F	G	GA	Drive End	Opposite Drive End	
10	192	—	35	10	0.75"	299.0	93.0	24	50	32	8	20.0	27.0	6205ZZ	6205ZZ	29
10	192	—	35	10	0.75"	324.0	93.0	24	50	32	8	20.0	27.0	6205ZZ	6205ZZ	32
14	—	264	57	12	0.75"	355.5	111.5	28	60	40	8	24.0	31.0	6306ZZ	6306ZZ	44
14	—	264	57	12	0.75"	381.5	111.5	28	60	40	8	24.0	31.0	6306ZZ	6306ZZ	52
16	—	311	48	12	1"	446.0	137.0	38	80	58	10	33.0	41.0	6308ZZ	6306ZZ	85
16	—	311	48	12	1"	484.0	137.0	38	80	56	10	33.0	41.0	6308ZZ	6306ZZ	97
18	—	377	73	15	1.25"	604.5	176.5	42	110	80	12	37.0	45.0	6309ZZ	6307ZZ	143
18	—	377	73	15	1.25"	648.5	176.5	42	110	80	12	37.0	45.0	6309ZZ	6307ZZ	165
20	—	421	93	15	1.5"	667.0	195.0	48	110	80	14	42.5	51.5	6211C3	6211C3	210
20	—	421	93	15	1.5"	667.0	195.0	48	110	80	14	42.5	51.5	6311ZZ	6310ZZ	217
20	—	421	93	15	1.5"	705.0	195.0	48	110	80	14	42.5	51.5	6211C3	6211C3	237
20	—	421	93	15	1.5"	705.0	195.0	48	110	80	14	42.5	51.5	6311ZZ	6310ZZ	243
25	—	469	81	19	2"	730.0	220.0	55	110	80	14	49.0	59.0	6312C3	6211C3	310
25	—	469	81	19	2"	730.0	220.0	55	110	80	16	49.0	59.0	6312	6310ZZ	330
25	—	469	81	19	2"	768.0	220.0	55	110	80	16	49.0	59.0	6312C3	6212C3	335
25	—	469	81	19	2"	768.0	220.0	55	110	80	16	49.0	59.0	6312	6212	365
30	—	524	115	19	3"	806.0	261.0	55	110	80	16	49.0	59.0	6312C3	6212C3	405
30	—	524	115	19	3"	836.0	261.0	60	140	110	18	53.0	64.0	6313	6213	415
30	—	524	115	19	3"	806.0	236.0	55	110	80	16	49.0	59.0	6312C3	6212C3	435
30	—	524	115	19	3"	836.0	236.0	60	140	110	18	53.0	64.0	6313	6213	445
36	—	581	106	24	4"	888.0	269.0	75	140	110	20	67.5	79.5	6317	6313	580
36	—	581	106	24	4"	896.0	269.0	55	110	80	16	49.0	59.0	6313C3	6313C3	630
36	—	581	106	24	4"	926.0	269.0	75	140	110	20	67.5	79.5	6317	6313	670
40	—	660	131	24	4"	991.0	293.0	60	140	110	18	53.0	64.0	6313C3	6313C3	800
40	—	660	131	24	4"	1021.0	293.0	85	170	140	22	76.0	90.0	NU318	6318	850
40	—	660	131	24	4"	1042.0	293.0	60	140	110	18	53.0	64.0	6313C3	6318C3	870
40	—	660	131	24	4"	1072.0	293.0	85	170	140	22	76.0	90.0	NU318	6318	920

## Typical Construction and Features, Type AEEDXU



- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>① Pressed Steel Fan Cover For Frames 90S-225M<br/>Cast Iron Fan Cover For Frames 250S-280M</li> <li>② Non-sparking External Fan</li> <li>③ Non-sparking Dust Flinger</li> <li>④ Oversized Bearings</li> <li>⑤ Cast-Iron Frame</li> <li>⑥ Copper Winding and Electromagnetic Steel Laminations</li> </ul> | <ul style="list-style-type: none"> <li>⑦ Forged Eye-bolt</li> <li>⑧ Oversized Cast Iron Conduit Box</li> <li>⑨ Dynamically Balanced Die-cast Rotor</li> <li>⑩ Improved Non-hydroscopic Insulation</li> <li>⑪ Efficient Close-High-Fins Design</li> <li>⑫ Zn-C Plated Hardware</li> <li>⑬ Cast Iron Endbells</li> <li>⑭ Stainless Breather and Drains</li> </ul> |
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## Hazardous Locations Listed by

Class	Group	Explosive Environment
I	D	Atmospheres Containing gasoline, hexane, naphtha, benzine, butane, propane, alcohols, acetone, benzol, lacquer solvent vapors, or natural gas.
II	E	Atmospheres containing dusts of aluminum, magnesium, or their commercial alloys.
	F	Atmospheres containing carbon black, coal, or coke dust.
	G	Atmospheres containing flour, starch, or grain dust.

All motors comply with operating temperature code T2D for Group D and T3B for Group E.F.G.