

TECO

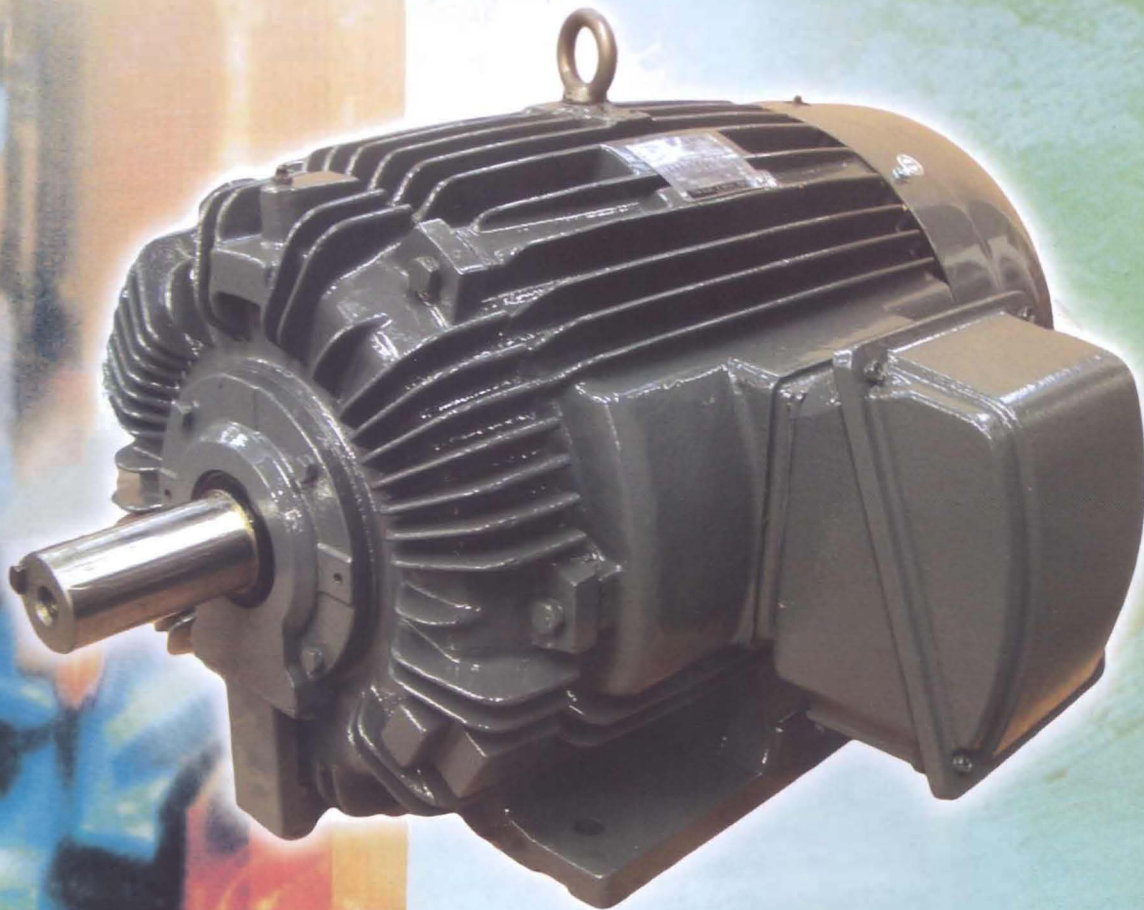
AEEB . AEVB Series

Standard Efficiency, IP55
Three-phase cage induction motors

Frame sizes 63 to 315M

0.25 to 250 HP

IEC dimension



TECO's new generation of totally enclosed fan cooled (TEFC) Squirrel Cage Induction Motor are designed, manufactured and tested to meet latest British Standard (BS)/Australia Standard (AS) and other international standards suitable for all general applications. TECO's unique design, first-grade material and excellent workmanship makes TECO Motors last much longer and give cost-efficient operation.

Standard and Specification

Performance :

All standard motors are designed to meet the requirements of the latest British Standard (BS)/Australia Standard (AS).

Enclosure :

Totally Enclosed IP54, IP55 and IP56 to BS 4999 Part 105 : 1988, EN 60 034: Part 5 : 1986. For other degrees of protection, please refer to TECO.

Designation	First Numeral Protection against solid objects	Second Numeral Protection against water
IP54	The ingress of dust is not totally prevented but dust does not enter in sufficient quantity to interfere with satisfactory operation of the machines.	Water splashing against the machine from any direction shall have no harmful effect.
IP55		Water projected by a nozzle against the machine from any direction shall have no harmful effect.
IP56		Water from heavy seas or water projected in powerful jets shall not enter the machine in harmful quantities.

Time Rating :

Maximum continuous rating type S1 duty to BS EN 60034-1 : 1995.

Cooling :

Totally enclosed fan cooled IC411 to BS EN 60034-6 : 1994, IEC 34-6 : 1991.

Mounting :

Motors can be provided in the following mounting forms to BS EN 60034-7 : 1993.

- Horizontal foot mounted
- Vertical flange mounted
- Horizontal foot and flange mounted

Insulation

All standard motors are Class F insulation with Class B temperature rise.

Insulation Class	B	F
Maximum Permissible Temperature	130°C	155°C
Measuring Method	Resistance Method	Resistance Method
Coil Windings Temperature Rise	80°C	100°C

Maximum ambient temperature is 40 °C. Other insulation Classes are available on request.

Direction of Rotation :

All standard motors are suitable for operation in either direction of rotation.

Supply and Operation Conditions :

Electric Supply :-

220, 380 and 415 volts standard and other voltages up to 690V can be supplied on request.

Voltage Variation :

All standard motors are suitable for continuous operation within $\pm 6\%$ rated voltage, supplying rated output at normal rate speed. Sustained operation on voltages exceeding $\pm 6\%$ rated voltage will result in overheating. They are also suitable for supply voltages with 1% phase unbalance.

Starting :

Motors up to 3HP are suitable for direct-on-line starting. Larger motors are suitable for both autotransformer and star-delta starting.

Ambient :

All standard motor are design to operate at ambient temperature of -20 °C to 40 °C (104 °F). For other ambient temperature please refer to TECO.

Altitude :

All standard motors are designed for operation at an altitude not exceeding 1,000m (3,300 feet) above sea-level. For higher altitudes please refer to TECO.

Construction

Frames and 'L' or 'F' Bracket (Endshields) :

Stator frames and 'L' or 'F' bracket (endshields) are cast out of high grade pig-iron for exceptional corrosion resistance and longer motor life, precisely machined to close tolerance and jig drilled to ensure rigid alignment, minimum vibration and interchangeability of parts.

Cooling System :

Frames and 'L' or 'F' bracket (endshields) have uniquely designed Close-High-Fins. Improved high air-flow external fan, assures low temperature rise, low noise and increase motor life.

Fan and Fan Cover :

The fans are of Poly Propylene.

Cast iron fans can be provided on all frame sizes if required. The fan cover is of pressed steel, securely bolted to the endshield. The air inlet mesh screen is designed to prevent a test finger touching the fan.

Cast iron fan covers are available for all frames as an option.

Bearings and Lubrication System :

2 Pole Motors

Standard motors are fitted with high quality ball bearings for up to D315M frame. Pre-lubrication double shielded bearings are used up to and including frame D160L but a full pressure grease relief valve arrangement is provided on frames D180 to D315M.

Motors other than 2 Pole

Standard motors are fitted with high quality ball bearings for up to D315 frame. Pre-lubrication double shielded bearings frame sizes up to and including frame D180L but all larger frames are fitted with pressure grease relief system.

Shaft :

The motor shaft material is made of carbon steel. Special keyway and shaft extensions are available on request.

Rotor Assembly :

The rotor core is made of low loss high grade electro-magnetic steel lamination. The rotor bars are pressure die cast of high conductivity aluminium and cast integrally with end rings and waffer fan blades. All rotor assemblies are dynamically balanced and surface is treated with corrosion free coating.

Stator, Windings and Insulation System :

Stator laminations are built of high grade, insulated cold rolled

motors are Class F insulation with Class B temperature rise. Heavy coated, heat and moisture resistance polyester enameled copper wire are used for stator winding.

Construction / Mounting :

Basic construction are for mounting in the B3 (horizontal foot mounted), B5 (horizontal flange mounted) and V1 (vertical mounting shaft down) position. Installations can also be in B6, B7 (Wall mounting with vertical shaft), B8 (Ceiling mounted), V3(flange mounting with vertical shaft) and B3/B5 (foot and flange mounting).

For foot mounted motors in vertical applications where the weight suspended on the shaft is in excess of a recommended pulley, reference should be made to the manufacturer for additional thrust load provisions.

Nameplate :

Nameplates are made of corrosion-free stainless steel.

Hardware :

All hardwares are electric-zinc plated for better corrosion resistance.

Finish :

All inside exposed surfaces are cleaned and applied with rust-proof coating.

Outside exterior is painted with phenolic rustproof base and then a lacquer surface finishing of Blue-Gray colour. (Munsell 7.5 BG4/2)

Terminal Box :

Cable entry to the terminal box can be adjusted to any one of the four positions at 90 degree intervals. The terminal box is mounted on the right hand side of the motor when viewed from shaft end, as standard. It can be transferred to the left hand side upon request. Earthing terminal is located in the terminal box

Pressed metal terminal boxes are for standard motors but cast iron types also be supplied.

Options :

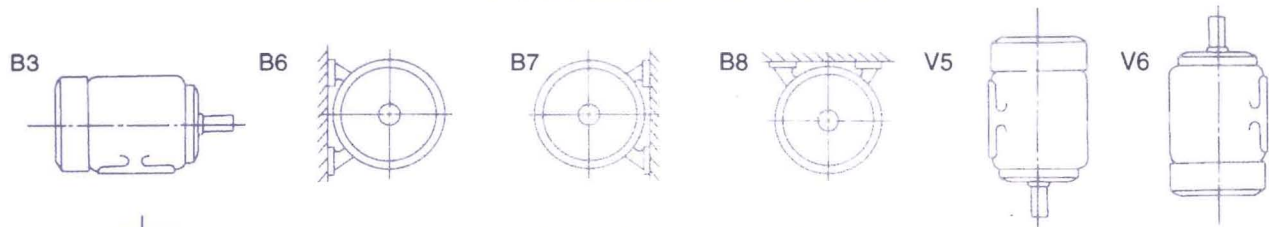
The following additional options are available :

- IP56, enclosure
- Class 'H' Insulation
- Grease relief valves for frame down to D100
- Anti-condensation heaters
- Thermistor protection
- Special paint finishes
- Special shaft extensions
- Dual-speed
- Smoke spill duty

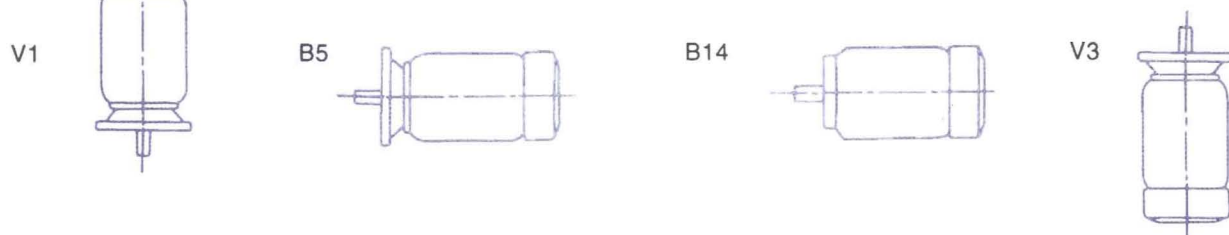
ORDERING INFORMATION

- * Application
- * Motor type
- * Voltage, frequency, output, number of poles
- * Across-the-line or reduced-voltage starting
- * Direct drive, or V-belt drive (Sheave diameter, width and weight, type of V-belts)
- * With or without slide rails or soleplates
- * Type, size and diameter of power lead
- * Indoor or outdoor use
- * Environmental conditions (Ambient temperature, explosive or corrosive gas, if exists)
- * Load inertia GD^2
- * Load characteristics

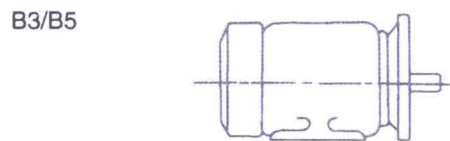
FOOT MOUNTED MOTOR



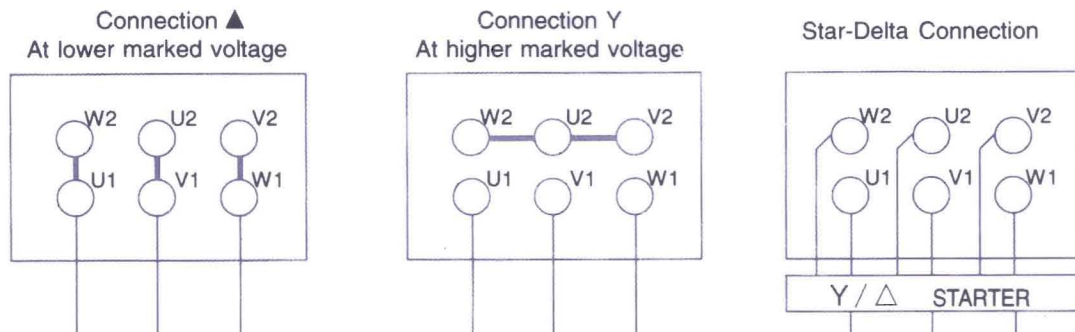
FLANGE MOUNTED MOTOR



FOOT AND FLANGE MOUNTED MOTOR

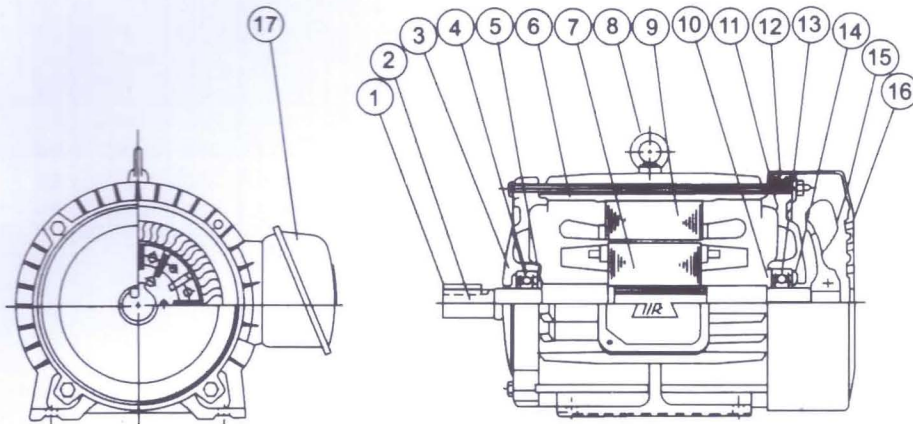


CONNECTION DRAWING



PARTS FOR TECO STANDARD FOOT - MOUNTED MOTOR.

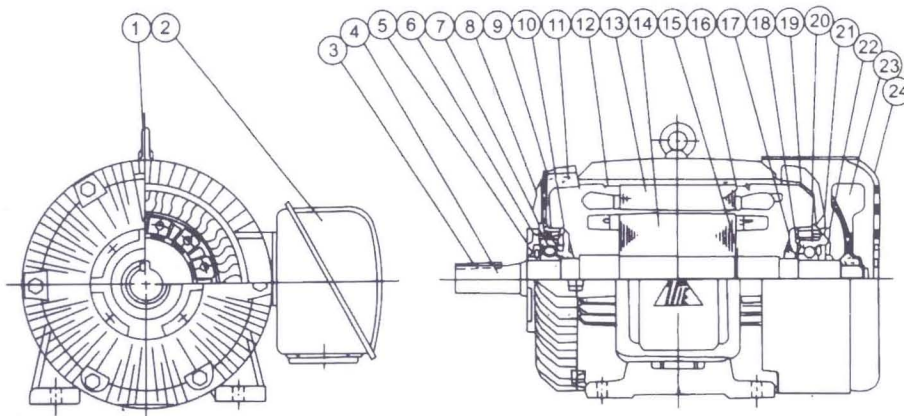
D63-D180



TYPICAL CONSTRUCTION

ITEM	NAME
1	Key
2	Shaft
3	' L ' Bracket
4	Bearing
5	Stop ring-bearing
6	Frame
7	Rotor
8	Eye bolt
9	Stator
10	Stop ring-bearing
11	' F ' Bracket
12	Support plate
13	Bearing
14	Pre-load spring
15	External fan
16	Fan cover
17	Terminal box

D200-D315



TYPICAL CONSTRUCTION

ITEM	NAME
1	Eye Bolt
2	Terminal box
3	Key
4	Shaft
5	' L ' Grease flinger
6	' L ' Bearing cover-outer
7	Bearing
8	' F ' Grease flinger
9	' F ' Grease nipple
10	' L ' Bearing cover-inner
11	' L ' Bracket
12	Frame
13	Stator
14	Rotor
15	Stop ring
16	Retainer ring-S
17	Bearing cover-inner
18	' F ' Grease flinger
19	' F ' Bracket
20	Bearing
21	' F ' Bearing cover-outer
22	' F ' Grease flinger
23	External fan
24	Fan cover

Motor types AEEB and AEVB, Class F insulation, 380 / 415V - 50HZ

Output		Full Load Speed (RPM)	Frame Size	% Efficiency			% Power Factor			Current (A)		Current (A)		Torque			Rotor GD ² Kg m ²	Approx Weight AEEB Kg	Approx Weight AEVB Kg	
HP	KW			Full Load	3/4 Load	1/2 Load	Full Load	3/4 Load	1/2 Load	Full Load	Locked Rotor	Full Load	Locked Rotor	Full Load	Locked Rotor	Pull Up				Pull Out
0.25	0.18	2730	63	61	57.5	50.5	77.5	69.5	58.5	0.60	2.7	0.55	2.5	0.066	335	335	340	0.002	9	9.5
		1345	63	64	63	57	68.5	58.5	45.5	0.64	2.6	0.59	2.4	0.135	220	215	240	0.002	9	9.5
		920	71	61	56	48	64	54	43.5	0.72	2.5	0.66	2.3	0.197	260	245	280	0.007	12	13
		710	80	52	46	37	47.5	41	34	1.15	3.5	1.05	3.2	0.256	360	350	370	0.010	20	18
0.5	0.37	2810	71	75	74	69.5	85	77	65	0.88	5.9	0.81	5.4	0.129	320	270	310	0.002	12	13
		1395	71	71.5	70.5	65.5	70.5	61	48.5	1.12	5.7	1.03	5.2	0.260	275	240	270	0.005	12	13
		925	80	66	63	57	67.5	56.5	45.0	1.27	5.5	1.16	5.0	0.392	220	215	240	0.009	20	18
		710	90S	64.5	61	53.5	60.5	48.5	39	1.45	5.5	1.33	5.0	0.511	190	185	265	0.017	23	24
0.75	0.55	2755	71	75	75.5	73	86	78.5	66	1.32	8.7	1.21	8	0.198	300	260	280	0.002	12	13
		1405	80	71.5	71	64	74.5	65	51.5	1.59	8.7	1.46	8	0.387	260	245	280	0.007	20	18
		915	80	68	67.5	62.5	72	60.5	48	1.74	8.2	1.59	7.5	0.595	230	215	230	0.012	20	18
		695	90L	70	70	65.5	70	59	47	1.74	7.9	1.59	7.2	0.783	170	140	205	0.023	27	27
1	0.75	2805	80	78	78.5	75.5	88	81	68	1.65	10.9	1.51	10	0.259	240	230	270	0.005	20	18
		1405	80	76.5	76	72.5	77	66	52.5	1.92	10.9	1.76	10	0.517	265	250	270	0.009	20	18
		940	90S	74	71	66.5	71	60.5	48	2.16	10.9	1.98	10	0.772	200	185	240	0.017	23	24
		700	100L	68	66.5	61	66	56.5	45.5	2.52	9.8	2.31	9	1.037	185	165	230	0.033	37	37
1.5	1.1	2810	80	80.5	81.5	80	87.5	81	70	2.41	17.5	2.21	16	0.387	270	250	280	0.006	20	18
		1415	90S	76.5	76.5	69.5	79	68.5	55.5	2.82	16.4	2.58	15	0.769	210	190	250	0.014	23	24
		940	90L	75	73	68	68.5	57	44.5	3.31	16.4	3.03	15	1.158	230	215	270	0.023	27	27
		690	100L	74.5	74.5	71	67.5	59	47	3.39	15.3	3.10	14	1.578	205	180	220	0.046	37	37
2	1.5	2825	90S	81	81	79	88	82	70.5	3.18	22.9	2.91	21	0.514	260	240	270	0.010	23	24
		1400	90L	78.5	78.5	75.5	81	72.5	59	3.56	21.8	3.26	20	1.037	220	195	255	0.017	27	27
		930	100L	76	76	70.5	75.5	65	52	3.95	21.8	3.62	20	1.561	200	190	230	0.033	37	37
		705	112M	75.5	75	71	67	59	46.5	4.48	19.7	4.10	18	2.059	185	150	240	0.065	45	47
3	2.2	2840	90L	83.5	84.5	83.5	89	84	74	4.58	34.9	4.19	32	0.767	245	245	290	0.014	27	27
		1425	100L	81	81	78.5	82.5	75	62	5.09	32.8	4.66	30	1.528	240	210	270	0.033	37	37
		950	112M	81	81	78	73.5	63	50	5.71	32.8	5.23	30	2.292	200	185	270	0.058	45	47
		705	132S	81.5	81.5	79	74	63.5	50.5	5.64	31.7	5.16	29	3.089	215	200	250	0.138	68	70
4	3	2865	100L	85	85.5	84	89	83.5	74	6	43.7	5.49	40	1.013	310	280	320	0.023	37	37
		1435	100L	83.5	83	80	82	73.5	61	6.62	49.1	6.06	45	2.023	300	275	340	0.046	37	37
		955	132S	85	85.5	84	81	75	64	6.59	43.7	6.03	40	3.040	200	190	270	0.125	68	70
		715	132M	82.5	81	77.5	67	58	45	8.2	43.7	7.51	40	4.061	265	245	310	0.180	77	80
5	3.7	2865	112M	86	86.5	86	91	88.5	82.5	7.24	61.1	6.63	56	1.258	290	265	330	0.042	44	47
		1440	112M	85	84.5	83	82	77	65	8.13	63.2	7.44	58	2.502	250	210	310	0.065	43	45
		955	132M	83	82.5	81	78	71	59	8.75	57.9	8.01	53	3.773	210	175	280	0.151	65	68
		720	160M	84.5	84	81.5	71	62.5	50	9.45	55.8	8.65	51	5.004	200	180	270	0.343	107	115
5.5	4	2870	112M	86	87	86	90.5	87.5	79.5	8.01	61	7.33	56	1.391	290	265	325	0.042	45	47
		1445	112M	86	86.5	84.5	82	76	64	8.84	61	8.09	56	2.763	240	220	310	0.065	45	47
		950	132M	85	85.5	84	80.5	74.5	62.5	9.11	60	8.34	55	4.202	190	175	260	0.151	77	80
		720	160M	84.5	83.5	80.5	74.5	64.5	51.5	9.91	60	9.07	55	5.545	200	180	270	0.344	128	120
7.5	5.5	2905	132S	87	86	83.5	88	85.5	79	11.1	83	10.2	76	1.874	205	185	260	0.063	68	70
		1445	132S	86	86	84.5	82.5	75.5	63.5	12	83	11	76	3.767	240	200	280	0.103	68	70
		960	132M	84.5	84	82	77	70	58	13.1	83	12	76	5.671	250	230	310	0.217	77	80
		720	160M	85.5	85.5	83	75.5	65.5	53	13.2	83	12.1	76	7.561	200	180	270	0.484	127	135
10	7.5	2880	132S	88	88	86.5	89	87.5	82.5	14.5	104	13.3	95	2.520	215	190	260	0.076	68	70
		1450	132M	88.5	89	87.5	86	81.5	71.5	14.9	104	13.6	95	5.006	260	220	300	0.143	77	80
		975	160M	88	87	84.5	79	71.5	59.5	16.3	104	14.9	95	7.445	265	225	300	0.400	128	120
		720	160L	86	86	84.5	76	65.5	53	17.4	104	15.9	95	10.081	200	190	270	0.588	151	148
15	11	2940	160M	89	89	87	89	85.5	77.5	21.5	156	19.7	143	3.703	215	180	285	0.147	128	120
		1455	160M	89.5	90	89	86.5	82.5	74.5	22	156	20.1	143	7.483	235	190	280	0.297	128	120
		970	160L	89	89.5	88.5	84	80	71	22.7	156	20.8	143	11.225	240	210	280	0.588	151	148
		730	180L	89	89.5	88	78	70.5	58.5	24.5	156	22.4	143	14.915	220	195	260	1.233	206	205

Note : 1. For ampere values of other voltage motors multiply the 415 volt values by the following factors :

Voltage	200	220	346	365	400	420	440	500	550
Factor	2.08	1.89	1.2	1.13	1.04	0.99	0.94	0.83	0.75

2. FLT = full-load torque

3. Data are subject to revisions without notice

Motor types AEEB and AEVB, Class F insulation, 380 / 415V - 50HZ

Output		Full Load Speed (RPM)	Frame Size	% Efficiency			% Power Factor			Current (A)		Current (A)		Torque				Rotor GD ² Kgm ²	Approx Weight AEEB Kg	Approx Weight AEVB Kg	
HP	KW			Full Load	3/4 Load	1/2 Load	Full Load	3/4 Load	1/2 Load	Full Load	Locked Rotor	Full Load	Locked Rotor	Full Load	Locked Rotor	Pull Up	Pull Out				
											380 Volts		415 Volts		Kg-m	% FLT	% FLT	% FLT			
20	15	2925	160M	90.5	91	90	91	90	85.5	27.5	209	25.2	191	4.963	215	180	270	0.183	128	120	
		1465	160L	90.5	90.5	89	86	80.5	71	29.2	213	26.7	195	9.909	240	195	285	0.381	151	148	
		970	180L	90	90.5	90	85	82.5	76	29.6	208	27.1	190	14.966	200	155	230	1.233	206	205	
		730	200L	89.5	89	87.5	77	70.5	59.5	32.9	208	30.1	190	19.887	200	180	240	1.610	293	280	
25	18.5	2930	160L	91.5	91.5	91	92	90	85.5	33.6	251	30.8	230	6.193	250	190	290	0.237	151	148	
		1450	180M	91	91	90.5	86	83.5	76.5	36.3	246	33.2	225	12.515	200	170	230	0.571	183	175	
		970	200L	91	91	91	83.5	82	76	37.2	246	34.1	225	18.708	205	170	215	1.610	293	280	
		730	225S	90	90	89	78	72	62	40.4	246	37	225	24.858	185	150	200	2.093	346	330	
30	22	2930	180M	92	92.5	91.5	90	88.5	83.5	41.1	295	37.6	270	7.432	220	190	270	0.283	190	190	
		1460	180L	91.5	91.5	90.5	86.5	82.5	74.5	42.9	295	39.3	270	14.915	215	180	260	0.744	206	205	
		975	200L	92.5	92.5	92	83.5	79.5	71.5	44	295	40.3	270	22.334	220	200	250	1.919	293	280	
		730	225M	91	90.5	89	77	70.5	59	48.5	295	44.4	270	29.830	200	175	220	2.442	370	360	
40	30	2960	200L	92	91.5	89	84.5	79	71	58.3	404	53.4	370	9.809	190	170	280	0.521	289	285	
		1470	200L	92.5	93	92.5	86.5	83.5	76.5	56.7	410	51.9	375	19.751	240	195	285	1.264	293	280	
		980	225M	91.5	91.5	88.5	81.5	75	65	60.8	394	55.7	361	29.627	220	190	240	2.326	370	360	
		730	250S	90.5	90	88.5	78.5	70.5	60	63.8	393	58.4	360	39.773	200	170	230	3.475	498	450	
50	37	2950	200L	92.5	92.5	91.5	88.5	87	81	69.2	494	63.4	452	12.303	180	145	260	0.633	289	285	
		1470	225S	92.5	92	91	85	81.5	74.5	72.1	494	66	452	24.689	200	175	230	1.649	346	330	
		980	250S	92.5	92.5	91.5	85.5	81	73	71.6	486	65.6	445	37.034	210	190	240	3.373	498	450	
		730	250M	91	91	89.5	79.5	73	62	78.3	481	71.7	440	49.716	200	170	230	4.572	562	520	
60	45	2950	225M	93	92.5	91	91.5	90	86	79.9	557	73.2	510	14.763	145	130	260	1.074	353	370	
		1470	225M	92.5	93	92	85.5	83	76.5	85.9	557	78.7	510	29.627	190	160	215	1.731	370	360	
		980	250M	92.5	92.5	91.5	84.5	79	69.5	87	573	79.7	525	44.440	230	210	270	3.829	562	520	
		725	280SC	92	91	90.2	80	74	66	92.8	552	85	505	60.5	140	110	210	8.4	650	710	
75	55	2960	250S	93.5	93.5	87.5	90.5	88	85.5	100	721	92	660	18.392	165	140	315	1.410	466	470	
		1480	250S	93.5	93.5	92	89	87	81	102	683	93.5	625	36.783	200	165	265	3.643	498	450	
		970	280SC	93	92.8	91.6	83	79	73	108	683	99	625	55.2	145	115	220	7	600	670	
		730	280MC	92.4	92	91	80	74	66	112	677	103	620	73.4	135	105	210	10	680	740	
100	75	2950	250M	94	94	93	90	89.5	86	134	934	123	855	24.605	150	120	285	1.678	517	545	
		1480	250M	94.5	94.5	93.5	88.5	87	83	135	934	124	855	49.044	240	200	280	4.490	562	520	
		975	280MC	93.6	93.5	91.6	84.5	80.5	73	144	928	132	850	74.9	140	110	210	10	690	790	
		730	315SC	93	92.4	91	80	75.5	68	153	928	140	850	100	135	105	210	19.1	840	920	
125	90	2950	280SA	94	93.9	91	88.5	86.5	84.5	164	1119	150	1025	29.7	130	105	220	2.7	620	660	
		1475	280SC	94	93.9	91	86.5	83	79	168	1119	154	1025	59.4	145	115	220	7	630	720	
		975	315SC	93.9	93.8	91.6	84.5	80.5	73	171	1114	157	1020	89.9	140	110	210	15.7	870	950	
		730	315MC	93	93	91.7	80	75.5	68	183	1114	168	1020	120	125	100	210	23.9	1020	1120	
150	110	2955	280MA	94	94	91	88.5	86.5	84.5	201	1365	184	1250	36.3	120	95	210	3.6	690	760	
		1480	280MC	94.5	94.5	91	86.5	84.5	79	204	1365	187	1250	72.4	125	100	210	8.7	710	780	
		975	315MC	94.1	94	92	84.5	80.5	73	211	1365	193	1250	110	120	95	210	17	970	1100	
175	132	2955	315SA	94.6	94.5	90.8	89.2	87.5	84.5	237	1562	217	1430	43.5	110	90	210	6.3	840	930	
		1480	315SC	94.8	94.8	91.2	87.5	84.5	80.5	242	1562	222	1430	86.9	125	100	210	11.3	890	1020	
		975	315MC	94.3	94.2	92.4	84.5	80.5	73	252	1562	231	1430	132	120	95	210	18.9	1100	1210	
200	150	2960	315MA	94.8	94.6	92	89.2	87.5	84.5	270	1775	247	1625	49.4	105	85	210	7.2	910	1000	
		1480	315MC	94.9	94.9	91.3	87.5	84.5	80.5	274	1775	251	1625	98.7	110	90	210	14.3	970	1070	
250	185	2960	315MA	94.9	94.8	92	89.2	87.5	84.5	333	2190	305	2005	60.9	105	85	210	7.3	1000	1100	
		1480	315MB	95	94.9	92	87.5	84.5	80.5	339	2190	310	2005	122	110	90	210	14.3	1070	1180	

Note : 1. For ampere values of other voltage motors multiply the 415 volt values by the following factors :

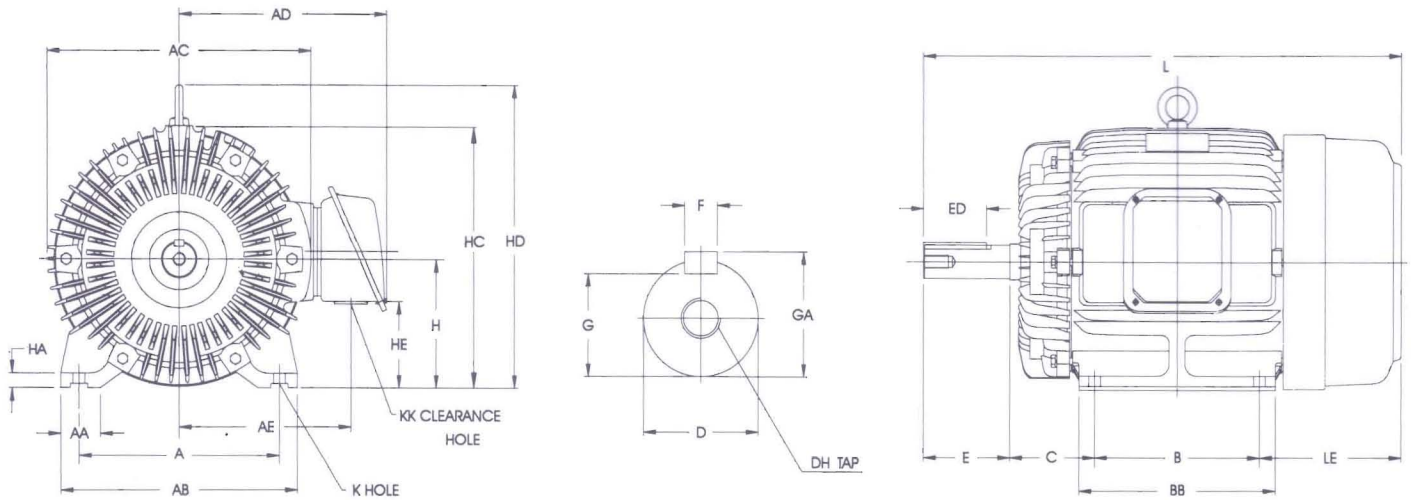
Voltage	200	220	346	365	400	420	440	500	550
Factor	2.08	1.89	1.2	1.13	1.04	0.99	0.94	0.83	0.75

2. FLT = full-load torque

3. Data are subject to revisions without notice

Motor type AEEB

Foot Mounting B3 (IM 1001) - Dimensions



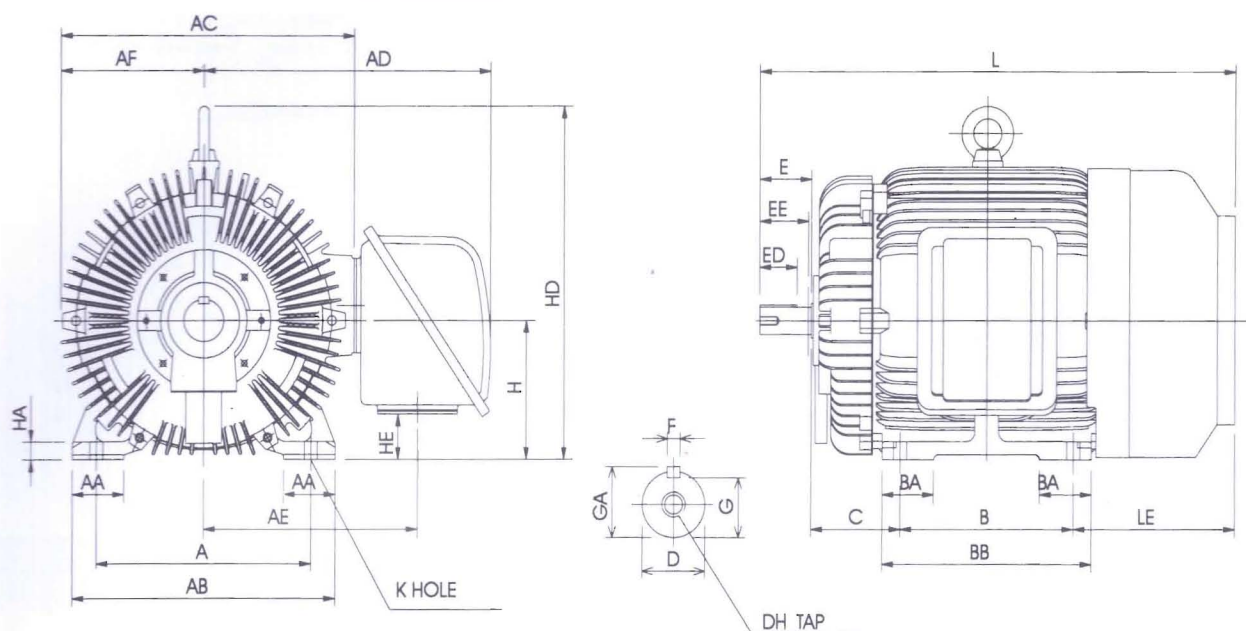
Output (HP)				Frame Size	Fixing							Shaft				
2P	4P	6P	8P		A	AB	B	BB	C	H	K	D	E	F	G	GA
0.25	0.25	--	--	63	100	120	80	100	40	63	7	11j6	23	--	10	--
0.5 / 0.75	0.5	0.25	--	71	112	140	90	115	45	71	7	14j6	30	5	11	16
1 / 1.5	0.75 / 1	0.5 / 0.75	0.25	80	125	155	100	130	50	80	10	19j6	40	6	15.5	21.5
2	1.5	1	0.5	90S	140	170	100	130	56	90	10	24j6	50	8	20	27
3	2	1.5	0.75	90L	140	170	125	150	56	90	10	24j6	50	8	20	27
4	3 / 4	2	1 / 1.5	100L	160	195	140	175	63	100	12	28j6	60	8	24	31
5 / 5.5	5 / 5.5	3	2	112M	190	224	140	175	70	112	12	28j6	60	8	24	31
7.5 / 10	7.5	4	3	132S	216	250	140	175	89	132	12	38k6	80	10	33	41
--	10	5 / 5.5 / 7.5	4	132M	216	250	178	212	89	132	12	38k6	80	10	33	41
15 / 20	15	10	5 / 5.5 / 7.5	160M	254	300	210	250	108	160	14.5	42k6	110	12	37	45
25	20	15	10	160L	254	300	254	300	108	160	14.5	42k6	110	12	37	45
30	--	--	--	180MA	279	355	241	297	121	180	14.5	48k6	110	14	42.5	51.5
--	25	--	--	180MC	279	355	241	297	121	180	14.5	48k6	110	14	42.5	51.5
--	30	20	15	180LC	279	355	279	335	121	180	14.5	48k6	110	14	42.5	51.5
40 / 50	--	--	--	200LA	318	400	305	365	133	200	18.5	55m6	110	16	49	59
--	40	25 / 30	20	200LC	318	400	305	365	133	200	18.5	55m6	110	16	49	59

Frame Size	General													Bearings	
	AA	AC	AD	AE	DH	ED	HA	HC	HD	HE	KK	L	LE	DE	NDE
63	28	144	123	93	M4X8	18	8	135	---	29	20	219	76	6201ZZ	6201ZZ
71	35.5	162	133	103	M5X10	24	8	152	---	54	20	250.5	85.5	6202ZZ	6202ZZ
80	35.5	177	159	122	M6X12	25	9	168	---	51	20	282.5	92.5	6204ZZ	6204ZZ
90S	35.5	200	170	135	M8X16	32	10	190	---	61	20	307.5	101.5	6205ZZ	6205ZZ
90L	35.5	200	170	135	M8X16	32	10	190	---	61	20	332.5	101.5	6205ZZ	6205ZZ
100L	45	219	180	144.5	M10X20	40	12.5	---	243	71	28	374.5	111.5	6206ZZ	6305ZZ
112M	45	238	189	154	M10X20	40	14	---	265	83	28	391.5	121.5	6306ZZ	6306ZZ
132S	45	273	225	179.5	M12X24	64	16	---	310	83	35	454	145	6308ZZ	6306ZZ
132M	45	273	225	179.5	M12X24	64	16	---	310	83	35	492	145	6308ZZ	6306ZZ
160M	50	334	263	218	M16X32	80	18	---	377	108	35	608	180	6309ZZ	6307ZZ
160L	50	334	263	218	M16X32	80	18	---	377	108	35	652	180	6309ZZ	6307ZZ
180MA	75	382	305	250	M16X32	80	20	---	421	119	35	672	200	6211C3	6211C3
180MC	75	382	305	250	M16X32	80	20	---	421	119	35	672	200	6311ZZ	6310ZZ
180LC	75	382	305	250	M16X32	80	20	---	421	119	35	710	200	6311ZZ	6310ZZ
200LA	80	420	342	279	M20X40	80	25	---	469	129	---	770	222	6312C3	6212C3
200LC	80	420	342	279	M20X40	80	25	---	469	129	---	770	222	6312	6212

- Note : 1. All dimensions are in mm. 2. Frame sizes 63 - 90L do not have lifting eye-bolt.
 3. Tolerance of shaft centre height H : +0, -0.5 for frame sizes 250 and smaller.
 4. Grease pre-packed shielded bearings for frame sizes 63 through 180L.
 Open bearings and with grease nipples for regreasing for frame sizes 180MA 2-Pole , 200LA, 200LC and larger.
 5. Frame size 63 motors can be provided with keyway or without keyway.

Motor type AEEB

Foot Mounting B3 (IM 1001) - Dimensions



Output (HP)				Frame Size	Fixing							Shaft					
2P	4P	6P	8P		A	AB	B	BB	C	H	K	D	E	EE	F	G	GA
---	50	---	25	225SC	356	450	286	350	149	225	18.5	60m6	140	-	18	53	64
60	---	---	---	225MA	356	450	311	375	149	225	18.5	55m6	110	-	16	49	59
---	60	40	30	225MC	356	450	311	375	149	225	18.5	60m6	140	-	18	53	64
*75	-	---	---	250SA	406	500	311	385	168	250	24	60m6	140	-	18	53	64
---	75	50	40	250SC	406	500	311	385	168	250	24	70m6	140	-	20	62.5	74.5
*100	---	---	---	250MA	406	500	349	425	168	250	24	60m6	140	-	18	53	64
---	100	60	50	250MC	406	500	349	425	168	250	24	70m6	140	-	20	62.5	74.5
*125	---	---	---	280SA	457	560	368	445	190	280	24	65m6	140	134	18	58	69
---	125	75	60	280SC	457	560	368	445	190	280	24	80m6	170	157	22	71	85
*150	---	---	-	280MA	457	560	419	495	190	280	24	65m6	140	134	18	58	69
---	150	100	75	280MC	457	560	419	495	190	280	24	80m6	170	157	22	71	85
*175	---	---	---	315SA	508	615	406	490	216	315	28	65m6	140	134	18	58	69
---	175	125	100	315SC	508	615	406	490	216	315	28	85m6	170	157	22	76	90
*200/250	---	---	---	315MA	508	615	457	540	216	315	28	65m6	140	134	18	58	69
---	200	150/175	125	315MC	508	615	457	540	216	315	28	85m6	170	157	22	76	90
---	*250	---	---	315MB	508	615	457	540	216	315	28	85m6	170	157	22	76	90

Frame Size	General													Bearings	
	AA	AC	AD	AE	AF	BA	DH	ED	HA	HD	HE	L	LE	Drive End	NDE
225SC	90	458	382	312	---	---	M20X40	110	30	524	153	816	241	6313	6213
225MA	90	458	382	312	---	---	M20X40	80	30	524	153	811	241	6312C3	6212C3
225MC	90	458	382	312	---	---	M20X40	110	30	524	153	841	241	6313	6213
250SA	100	510	479	364	---	---	M20X40	110	36	575	139	882.5	263.5	6313C3	6213C3
250SC	100	510	479	364	---	---	M20X40	110	36	575	139	882.5	263.5	6316 (NU216)	6213
250MA	100	510	479	364	---	---	M20X40	110	36	575	139	920.5	263.5	6313C3	6213C3
250MC	100	510	479	364	---	---	M20X40	110	36	575	139	920.5	263.5	6316 (NU216)	6213
280SA	110	625	610	455	305	110	M20X40	110	36	710	91	1042	344	6314C3	6314C3
280SC	110	625	610	455	305	110	M20X40	140	36	710	91	1072	344	6318 (NU318C3)	6316
280MA	110	625	610	455	305	130	M20X40	110	36	710	91	1092	343	6314C3	6314C3
280MC	110	625	610	455	305	130	M20X40	140	36	710	91	1122	343	6318 (NU318C3)	6316
315SA	115	625	610	455	305	115	M20X40	110	40	743	126	1131	369	6314C3	6314C3
315SC	115	625	610	455	305	115	M20X40	140	40	743	126	1161	369	6320 (NU320C3)	6316
315MA	115	625	610	455	305	115	M20X40	110	40	743	126	1182	369	6314C3	6314C3
315MC	115	625	610	455	305	115	M20X40	140	40	743	126	1212	369	6320 (NU320C3)	6316
315MB	115	625	610	455	305	115	M20X40	140	40	743	126	1212	369	6320 (NU320C3)	6316

Note : 1. All dimensions are in mm.

2. Tolerance of shaft and diameter D : m6

3. Tolerance of shaft centre height H : (+0, -0.5) for frame 225S to 250M, and (+0, -1) for frame 280C to 315M

4. Output (HP) with mark * is for direct coupling drive only. 5. Usable shaft length : EE

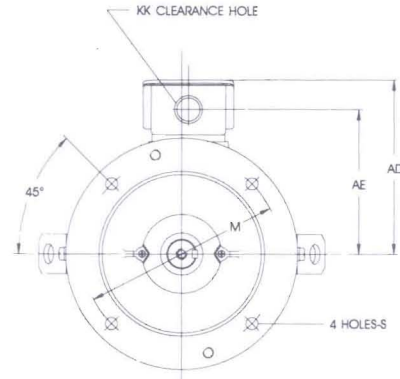
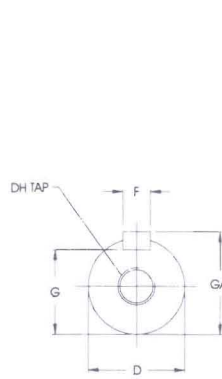
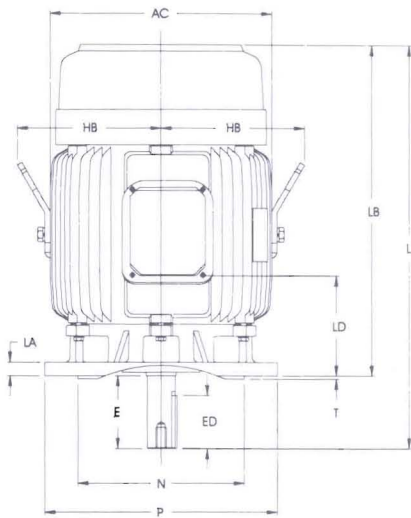
6. Roller bearings in brackets () are for 6 Pole and 8 Pole motors. For frame sizes 250 through 315, NU series roller bearings can be fitted to the drive end of the 4 Pole motors when higher radial loads are encountered, such as

Motor type AEVB

Flange- mounting V1 (IM 3011) - Dimensions

Frame Sizes 63-200L with 4 holes - S as shown.

Frame sizes 225S-250M with 8 holes - S equally-spaced. (see Page 11)

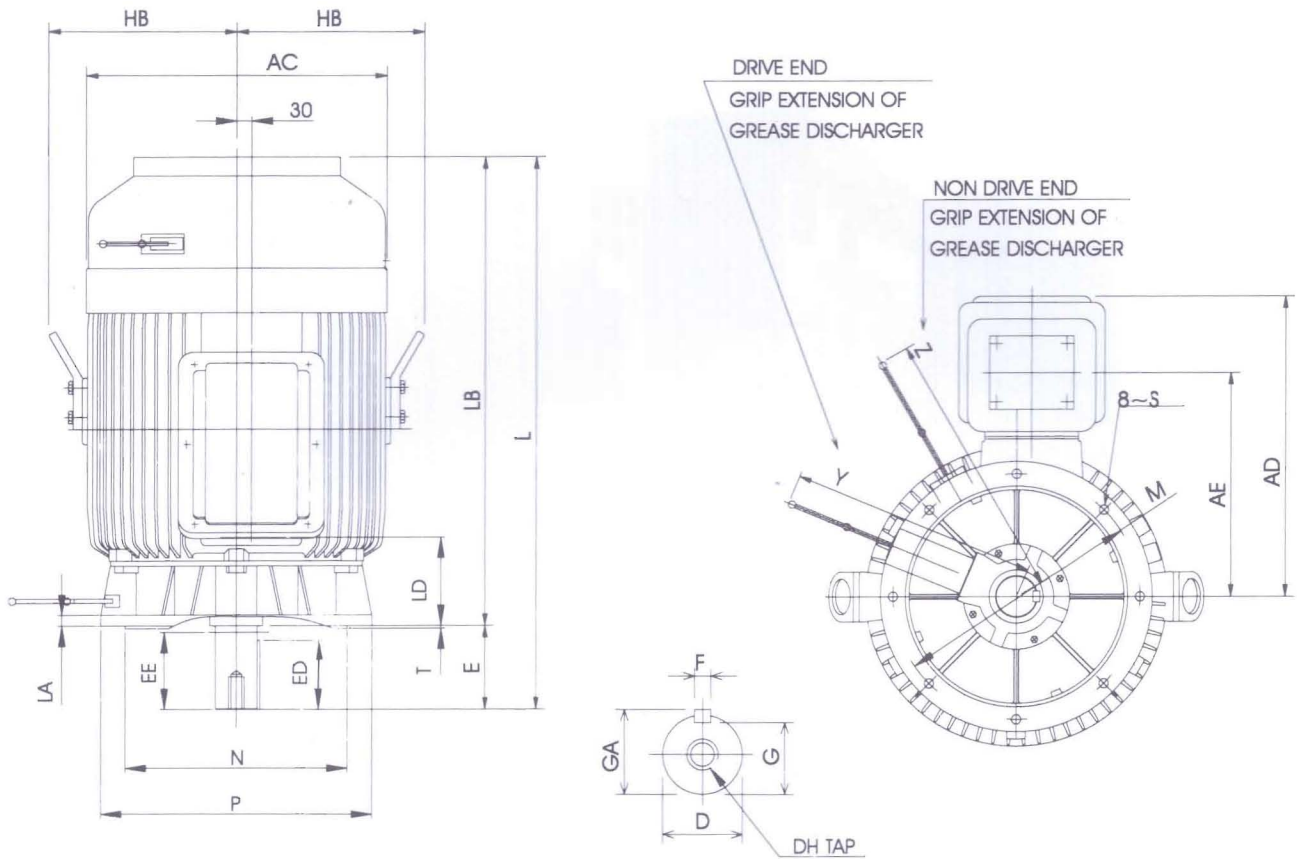


Output (HP)				Frame Size	Fixing						Shaft				
2P	4P	6P	8P		M	N	P	S	T	LA	D	E	F	G	GA
0.25	0.25	--	--	63	130	110	160	10	3.5	12	11j6	23	--	10	--
0.5 / 0.75	0.5	0.25	--	71	130	110	160	10	3.5	12	14j6	30	5	11	16
1 / 1.5	0.75 / 1	0.5 / 0.75	0.25	80	165	130	200	12	3.5	12	19j6	40	6	15.5	21.5
2	1.5	1	0.5	90S	165	130	200	12	3.5	12	24j6	50	8	20	27
3	2	1.5	0.75	90L	165	130	200	12	3.5	12	24j6	50	8	20	27
4	3 / 4	2	1 / 1.5	100L	215	180	250	14.5	4	16	28j6	60	8	24	31
5 / 5.5	5 / 5.5	3	2	112M	215	180	250	14.5	4	16	28j6	60	8	24	31
7.5 / 10	7.5	4	3	132S	265	230	300	14.5	4	20	38k6	80	10	33	41
--	10	5 / 5.5 / 7.5	4	132M	265	230	300	14.5	4	20	38k6	80	10	33	41
15 / 20	15	10	5 / 5.5 / 7.5	160M	300	250	350	18.5	5	20	42k6	110	12	37	45
25	20	15	10	160L	300	250	350	18.5	5	20	42k6	110	12	37	45
30	--	--	--	180MA	300	250	350	18.5	5	20	48k6	110	14	42.5	51.5
--	25	--	--	180MC	300	250	350	18.5	5	20	48k6	110	14	42.5	51.5
--	30	20	15	180LC	300	250	350	18.5	5	20	48k6	110	14	42.5	51.5
40 / 50	--	--	--	200LA	350	300	400	18.5	5	20	55m6	110	16	49	59
--	40	25 / 30	20	200LC	350	300	400	18.5	5	20	55m6	110	16	49	59
--	50	--	25	225SC	400	350	450	18.5	5	22	60m6	140	18	53	64
60	--	--	--	225MA	400	350	450	18.5	5	22	55m6	110	16	49	59
--	60	40	30	225MC	400	350	450	18.5	5	22	60m6	140	18	53	64
75	--	--	--	250SA	500	450	550	18.5	5	22	60m6	140	18	53	64
--	75	50	40	250SC	500	450	550	18.5	5	22	70m6	140	20	62.5	74.5
100	--	--	--	250MA	500	450	550	18.5	5	22	60m6	140	18	53	64
--	100	60	50	250MC	500	450	550	18.5	5	22	70m6	140	20	62.5	74.5

Frame Size	General										Bearings	
	AC	AD	AE	DH	ED	HB	KK	L	LB	LD	DE	NDE
63	144	117	88	M4X8	10	--	20	238	215	74	6201ZZ	6201ZZ
71	162	127	98	M5X10	14	--	20	266	236	82	6202ZZ	6202ZZ
80	177	152	117	M6X12	25	--	20	272	232	55	6204ZZ	6204ZZ
90S	200	165	130	M8X16	32	--	20	336	286	100	6205ZZ	6205ZZ
90L	200	165	130	M8X16	32	--	20	361	311	113	6205ZZ	6205ZZ
100L	219	174	140	M10X20	40	140	28	363	303	88	6206ZZ	6305ZZ
112M	238	184	149	M10X20	40	150	28	422	362	135	6306ZZ	6306ZZ
132S	273	219	175	M12X24	64	169	35	446	366	97	6308ZZ	6306ZZ
132M	273	219	175	M12X24	64	169	35	484	404	116	6308ZZ	6306ZZ
160M	334	258	213	M16X32	80	217	35	604	494	151	6309ZZ	6307ZZ
160L	334	258	213	M16X32	80	217	35	648	538	173	6309ZZ	6307ZZ
180MA	382	303	245	M16X32	80	241	35	667	557	170	6211C3	6211C3
180MC	382	303	245	M16X32	80	241	35	667	557	170	6311ZZ	6310ZZ
180LC	382	303	245	M16X32	80	241	35	705	595	189	6311ZZ	6310ZZ
200LA	420	336	274	M20X40	80	260	--	768	658	194	6312C3	6212C3
200LC	420	336	274	M20X40	80	260	--	768	658	194	6312	6212
225SC	458	427	326	M20X40	110	286	--	816	676	105	6313	6213
225MA	458	427	326	M20X40	80	286	--	811	701	105	6312C3	6212C3
225MC	458	427	326	M20X40	110	286	--	841	701	105	6313	6213
250SA	510	493	378	M20X40	110	312	--	882.5	742.5	85.5	6313C3	6213C3
250SC	510	493	378	M20X40	110	312	--	882.5	742.5	85.5	6316(NU216)	6213
250MA	510	493	378	M20X40	110	312	--	920.5	780.5	104.5	6313C3	6213C3
250MC	510	493	378	M20X40	110	312	--	920.5	780.5	104.5	6316(NU216)	6213

Motor type AEVB

Flange- mounting V1 (IM 3011) - Dimensions



Output (HP)				Frame Size	Fixing						Shaft				
2P	4P	6P	8P		M	N	P	S	T	LA	D	E	F	G	GA
*125	---	---	---	280SA	500	450	550	19	5	22	65m6	140	18	58	69
---	125	75	60	280SC	500	450	550	19	5	22	80m6	170	22	71	85
*150	---	---	---	280MA	500	450	550	19	5	22	65m6	140	18	58	69
---	150	100	75	280MC	500	450	550	19	5	22	80m6	170	22	71	85
*175	---	---	---	315SA	600	550	660	24	6	25	65m6	140	18	58	69
---	175	125	100	315SC	600	550	660	24	6	25	85m6	170	22	76	90
*200 / 250	---	---	---	315MA	600	550	660	24	6	25	65m6	140	18	58	69
---	200	150 / 175	125	315MC	600	550	660	24	6	25	85m6	170	22	76	90
---	*250	---	---	315MB	600	550	660	24	6	25	85m6	170	22	76	90

Frame Size	General												Bearings	
	AC	AD	AE	DH	ED	EE	HB	L	LB	LD	Y	Z	Drive End	NDE
280SA	610	610	455	M20X40	110	134	383	1042	902	156	555	555	6314C3	6314C3
280SC	610	610	455	M20X40	140	157	383	1072	902	156	500	555	6318 (NU318C3)	6316
280MA	610	610	455	M20X40	110	134	383	1131	991	200	555	555	6314C3	6314C3
280MC	610	610	455	M20X40	140	157	383	1161	991	200	500	555	6318 (NU318C3)	6316
315SA	610	610	455	M20X40	110	134	383	1131	991	200	585	585	6314C3	6314C3
315SC	610	610	455	M20X40	140	157	383	1161	991	200	560	555	6320 (NU320C3)	6316
315MA	610	610	455	M20X40	110	134	383	1182	1042	226	585	585	6314C3	6314C3
315MC	610	610	455	M20X40	140	157	383	1212	1042	226	560	555	6320 (NU320C3)	6316
315MB	610	610	455	M20X40	140	157	383	1212	1042	226	560	555	6320 (NU320C3)	6316

- Note : 1. All dimensions are in mm. 2. Tolerance of N : h7
 3. Output (HP) with mark* is for direct coupling service only 4. Usable shaft length : EE
 5. Roller Bearings in () are for 6 Pole and 8 Pole motors only. NU bearing can be fitted to 4 Pole 75HP and larger if they are employed in belt service 6. Data are subject to revisions without notice