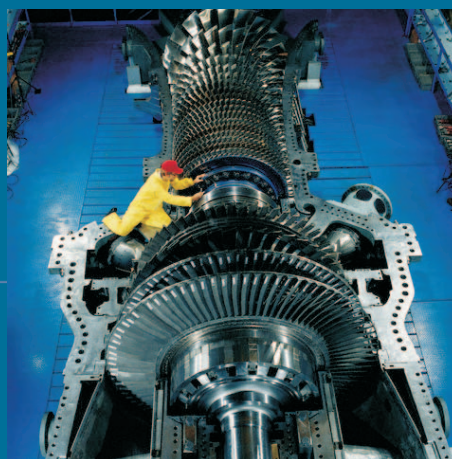
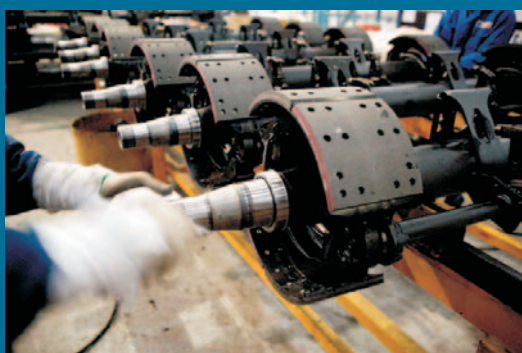




OXFORD

IP55 Metric Motors **Driving Industry World Over**

ELECTRIC MOTORS



ISO 9001 CERTIFIED

WORLD CLASS INDUCTION MOTORS

Long life features.

Our experience has given us the knowledge to provide motors you can depend on and motors that last. Here are some of the features that set these motors apart.



Premium insulation system.

The insulation system has been designed to withstand a wide range of environmental conditions, thermal shock and voltage stress. Its non-hygroscopic insulation components in the stator resist moisture and help prevent motor failure.



Efficient cooling system.

The cooler a motor runs, the longer its insulation will last. High airflow with an external fan on IP55 motors assure cool operation, low noise and increased motor life.



Vacuum de-gassed, clean steel bearings. Bearings are anti-friction shielded with lithium-based grease.



Pressure cast aluminum rotor.

Pressure casting eliminates variations in bar and end ring resistance. It produces a rotor that gives more consistent performance.



Heavy-duty stator frames and endshields. Cast iron construction of stator frames and endshields assures excellent corrosion resistance in most industrial environments. Parts are precisely machined to close tolerance and jig drilled to assure alignment, minimum vibration and ready interchangeability.



Dynamically balanced rotor.

Balance is critical to the life of the motor. The slightest deviation from the standard can result in excessive vibration which causes additional wear on the bearings and premature motor failure. To prevent this problem, precision electronic equipment is used to carefully balance every rotor and shaft assembly.



Copper Windings. Heat and moisture resistant polyester enameled copper wire is used for all stator windings.

Specially designed shaft.

An endshield design that provides IP55 motor protection. It helps prevent contaminants from getting into the bearing.

Easy access conduit box.

The conduit box can be removed and rotated in 90° increments to facilitate installation with terminal board.



OXFORD Motors is proud to introduce the IP55 Metric Motor line of rugged, all-purpose motors. The cast iron, totally enclosed fan cooled IP55 construction makes this motor the preferred choice for almost any application in even the toughest environments.

TYPICAL APPLICATIONS:

- ★ Material handling ★ Machine Tools ★ Pulverisors
- ★ Fans, Blowers ★ Agro Industry ★ Compressors
- ★ Lifts ★ Stone Crushers ★ Pumps
- ★ Valve Actuators ★ Fertilizers ★ Gear Drives
- ★ Saw Mills ★ Textiles ★ Flour Mills
- ★ Cranes ★ Food Processing
- ★ Granite / Marble / Stone Industry

STANDARD RATINGS :

- 2 pole 0.18-315Kw
- 4 pole 0.12-315Kw
- 6 pole 0.18-250Kw
- 8 pole 0.18-200Kw
- 10 pole 45.0-160Kw

STANDARDS:

Built to meet or exceed the IEC standards for dimensions and performance.

- IEC 34-1 Performance
- IEC 72D Dimensions
- IEC 34-5 Degree of Protection

EFFICIENCY :

Confirm to **EFF-2** Level & are **CE** marked.

POWER SUPPLY :

For greater application flexibility and increased safety margin our motors are suitable for 415V +/-6%, 50Hz +/-5%, combined variation allowed +/-10%

AMBIENT TEMPERATURE :

-15 to 45 degree C is standard.

SERVICE FACTOR :

These motors have a 1.15 S.F. at 50Hz, typical for IEC motors, Duty class S1.



CONSTRUCTION :

The rugged cast iron construction of the frame, endshields, integral feet and flanges absorbs Shock and reduce motor vibration to provide a low-maintenance motor life.

TERMINAL BOX :

The terminal box is of cast iron construction and is available on Top.

STATOR WINDING & INSULATION:

The stator core is built up from low loss, high permeability, silicon steel for increased efficiency. It features a class F insulation system with design for class B maximum temperature rise.

ROTOR :

The rotor is built with the same high quality lamination steel, die cast with high conductivity aluminum, Shrunk fit on to a high strength carbon-steel shaft. The rotor assembly is dynamically balanced to Provide low noise and smooth, vibration-free operation for long trouble free life.

BEARINGS :

All motors use 100,000 hours direct coupled/25,000 hours belted, anti-friction, deep-grooved ball Bearings of 63 series, on drive & non drive end, tight fit in 160 Frame & above

COOLING METHOD:

IC0141 bi directional cooling fan.

CONNECTION:

Star-connection for up to 3Kw, delta-connection for 4Kw and above.

WARRANTY:

Oxford motors are warranted to be free from defects in material, workmanship for a period of one year.

TECHNICAL DATA

415V 50 HZ Synchronous Speed 3000RPM (2Poles)										
Type	Rated Output		Current (A) at 415V	Speed (r / min)	Eff %	Power Factor (cos)	Max Torque	Locked Torque	Locked Current	Weight (kg)
	KW	HP					Rated Torque	Rated Torque	Rated Current	
63M1-2	0.18	0.25	0.48	2720	65.0	0.80	2.2	2.2	5.5	9
63M2-2	0.25	0.33	0.63	2720	68.0	0.81	2.2	2.2	5.5	10
71M1-2	0.37	0.50	0.91	2740	70.0	0.81	2.2	2.2	6.1	14
71M2-2	0.55	0.75	1.28	2740	73.0	0.82	2.3	2.2	6.1	15
80M1-2	0.75	1.0	1.68	2840	75.0	0.83	2.3	2.2	6.1	18
80M2-2	1.1	1.5	2.39	2840	76.2	0.84	2.3	2.2	7.0	19
90S-2	1.5	2.0	3.16	2840	78.5	0.84	2.3	2.2	7.0	22
90L-2	2.2	3.0	4.45	2840	81.0	0.85	2.3	2.2	7.0	25
100L-2	3	4.0	5.81	2860	82.6	0.87	2.3	2.2	7.5	33
112M-2	4	5.5	7.51	2880	84.2	0.88	2.3	2.2	7.5	42
132S1-2	5.5	7.5	10.1	2900	85.7	0.88	2.3	2.2	7.5	60
132S2-2	7.5	10	13.6	2900	87.0	0.88	2.3	2.2	7.5	65
160M1-2	11	15	19.5	2930	88.4	0.89	2.3	2.2	7.5	109
160M2-2	15	20	26.2	2930	89.4	0.89	2.3	2.2	7.5	118
160L-2	18.5	25	31.7	2930	90.0	0.90	2.3	2.2	7.5	141
180M-2	22	30	37.6	2940	90.5	0.90	2.3	2.0	7.5	170
200L1-2	30	40	50.7	2950	91.4	0.90	2.3	2.0	7.5	249
200L2-2	37	50	62.2	2950	92.0	0.90	2.3	2.0	7.5	255
225M-2	45	60	75.2	2960	92.5	0.90	2.3	2.0	7.5	306
250M-2	55	75	91.4	2965	93.0	0.90	2.3	2.0	7.5	403
280S-2	75	100	122	2970	93.6	0.91	2.3	2.0	7.5	544
280M-2	90	125	147	2970	93.9	0.91	2.3	2.0	7.5	620
315S-2	110	150	179	2975	94.0	0.91	2.2	1.8	7.1	842
315M-2	132	175	213	2975	94.5	0.91	2.2	1.8	7.1	1010
315L1-2	160	220	256	2975	94.6	0.92	2.2	1.8	7.1	1110
315L2-2	200	270	319	2975	94.8	0.92	2.2	1.8	7.1	1200
355M-2	250	350	397	2980	95.3	0.92	2.2	1.6	7.1	2045
355L-2	315	425	498	2980	95.6	0.92	2.2	1.6	7.1	2578

TECHNICAL DATA

415V 50 HZ Synchronous Speed 1500RPM (4Poles)										
Type	Rated Output		Current (A) at 415V	Speed (r / min)	Eff %	Power Factor (cos)	Max Torque	Locked Torque	Locked Current	Weight (kg)
	KW	HP					Rated Torque	Rated Torque	Rated Current	
63M1-4	0.12	0.17	0.40	1310	57.0	0.72	2.2	2.1	4.4	9
63M2-4	0.18	0.25	0.57	1310	60.0	0.73	2.2	2.1	4.4	10
71M1-4	0.25	0.33	0.72	1330	65.0	0.74	2.2	2.1	5.2	13
71M2-4	0.37	0.50	1.03	1330	67.0	0.75	2.2	2.1	5.2	14
80M1-4	0.55	0.75	1.44	1390	71.0	0.75	2.3	2.4	5.2	17
80M2-4	0.75	1.0	1.86	1390	73.0	0.77	2.3	2.4	6.0	18
90S-4	1.1	1.5	2.61	1390	76.2	0.77	2.3	2.3	6.0	23
90L-4	1.5	2.0	3.37	1390	78.5	0.79	2.3	2.3	6.0	26
100L1-4	2.2	3.0	4.66	1410	81.0	0.81	2.3	2.3	7.0	33
100L2-4	3	4.0	6.2	1410	82.6	0.82	2.3	2.3	7.0	37
112M-4	4	5.5	8.1	1435	84.2	0.82	2.3	2.3	7.0	46
132S-4	5.5	7.5	10.8	1440	85.7	0.83	2.3	2.3	7.0	63
132M-4	7.5	10	14.3	1440	87.0	0.84	2.3	2.3	7.0	76
160M-4	11	15	20.4	1460	88.4	0.85	2.3	2.2	7.0	116
160L-4	15	20	27.5	1460	89.4	0.85	2.3	2.2	7.5	135
180M-4	18.5	25	33.6	1470	90.0	0.85	2.3	2.2	7.5	175
180L-4	22	30	39.8	1470	90.5	0.85	2.3	2.2	7.5	185
200L-4	30	40	53.1	1470	92.4	0.86	2.3	2.2	7.2	250
225S-4	37	50	64.3	1475	92.0	0.87	2.3	2.2	7.2	306
225M-4	45	60	77.8	1475	92.5	0.87	2.3	2.2	7.2	342
250M-4	55	75	94.6	1480	93.0	0.87	2.3	2.2	7.2	420
280S-4	75	100	128	1480	93.6	0.87	2.3	2.2	7.2	562
280M-4	90	125	153	1480	93.9	0.87	2.3	2.2	7.2	667
315S-4	110	150	184	1480	94.5	0.88	2.2	2.1	6.9	1000
315M-4	132	175	220	1480	94.8	0.88	2.2	2.1	6.9	1100
315L1-4	160	220	263	1480	94.9	0.89	2.2	2.1	6.9	1160
315L2-4	200	270	329	1480	95.0	0.89	2.2	2.1	6.9	1200
355M-4	250	350	406	1490	95.3	0.90	2.2	2.1	6.9	2050
355L-4	315	425	509	1490	95.6	0.90	2.2	2.1	6.9	2698

TECHNICAL DATA

415V 50 HZ Synchronous Speed 1000RPM (6 Poles)

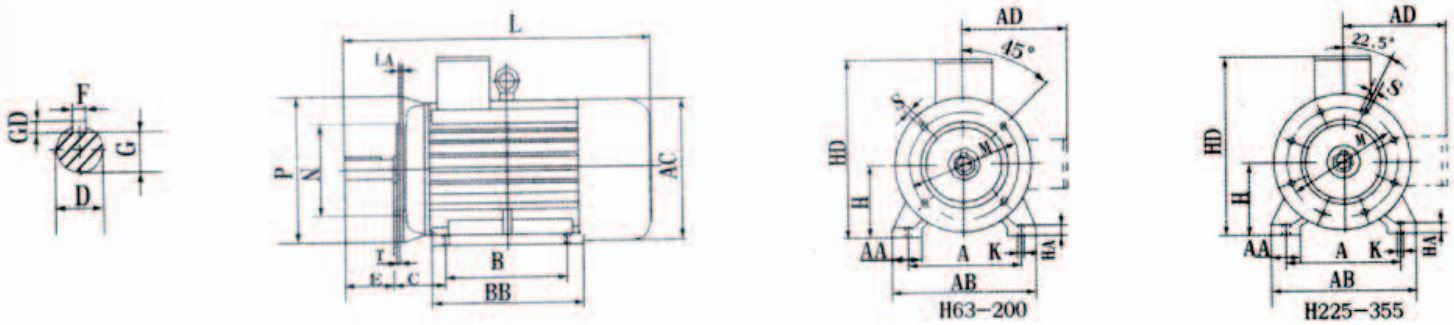
Type	Rated Output		Current (A) at 415V	Speed (r / min)	Eff %	Power Factor (cos)	Max Torque	Locked Torque	Locked Current	Weight (kg)
	KW	HP					Rated Torque	Rated Torque	Rated Current	
71M1-6	0.18	0.25	0.74	850	56.0	0.66	2.0	1.9	4.0	13
71M2-6	0.25	0.33	0.95	850	59.0	0.68	2.0	1.9	4.0	14
80M1-6	0.37	0.50	1.19	885	62.0	0.70	2.0	1.9	4.7	19
80M2-6	0.55	0.75	1.64	885	65.0	0.72	2.1	1.9	4.7	20
90S-6	0.75	1.0	2.1	910	69.0	0.72	2.1	2.0	5.5	22
90L-6	1.1	1.5	2.91	910	72.0	0.73	2.1	2.0	5.5	24
100L-6	1.5	2.0	3.61	920	76.0	0.76	2.1	2.0	5.5	32
112M-6	2.2	3.0	5.1	935	79.0	0.76	2.1	2.1	6.5	42
132S-6	3	4.0	6.8	960	81.0	0.76	2.1	2.1	6.5	58
132M1-6	4	5.5	8.9	960	82.0	0.76	2.1	2.1	6.5	69
132M2-6	5.5	7.5	11.8	960	84.0	0.77	2.1	2.1	6.5	81
160M-6	7.5	10	15.6	970	86.0	0.78	2.1	2.0	6.5	111
160L-6	11	15	22.1	970	87.5	0.79	2.1	2.0	6.5	139
180L-6	15	20	28.9	970	89.0	0.81	2.1	2.1	7.0	185
200L1-6	18.5	25	35.3	980	90.0	0.81	2.1	2.1	7.0	228
200L2-6	22	30	40.9	980	90.0	0.83	2.1	2.1	7.0	260
225M-6	30	40	54.3	980	91.5	0.84	2.1	2.0	7.0	292
250M-6	37	50	65	980	92.0	0.86	2.1	2.1	7.0	408
280S-6	45	60	78.7	980	92.5	0.86	2.0	2.1	7.0	536
280M-6	55	75	95.9	980	92.8	0.86	2.0	2.1	7.0	595
315S-6	75	100	130	985	93.5	0.86	2.0	2.0	7.0	930
315M-6	90	125	155	985	93.8	0.86	2.0	2.0	7.0	1030
315L1-6	110	150	189	985	94.0	0.86	2.0	2.0	6.7	1150
315L2-6	132	175	224	985	94.2	0.87	2.0	2.0	6.7	1210
355M1-6	160	220	267	990	94.5	0.88	2.0	1.9	6.7	1696
355M2-6	200	270	334	990	94.7	0.88	2.0	1.9	6.7	2020
355L-6	250	350	416	990	94.9	0.88	2.0	1.9	6.7	2865

TECHNICAL DATA

415V 50 HZ Synchronous Speed 750RPM (8 Poles)

Type	Rated Output		Current (A) at 415V	Speed (r / min)	Eff %	Power Factor (cos)	Max Torque	Locked Torque	Locked Current	Weight (kg)
	KW	HP					Rated Torque	Rated Torque	Rated Current	
80M1-8	0.18	0.25	0.88	645	51.0	0.61	1.9	1.8	3.3	17
80M2-8	0.25	0.33	1.15	645	54.0	0.61	1.9	1.8	3.3	18
90S-8	0.37	0.50	1.49	670	62.0	0.61	1.9	1.8	4.0	22
90L-8	0.55	0.75	2.17	670	63.0	0.61	2.0	1.8	4.0	24
100L1-8	0.75	1.0	2.19	680	71.0	0.67	2.0	1.8	4.0	28
100L2-8	1.1	1.5	3.04	680	73.0	0.69	2.0	1.8	5.0	30
112M-8	1.5	2.0	4.0	690	75.0	0.69	2.0	1.8	5.0	37
132S-8	2.2	3.0	5.5	705	78.0	0.71	2.0	1.8	6.0	58
132M-8	3	4.0	7.2	705	79.0	0.73	2.0	1.8	6.0	74
160M1-8	4	5.5	9.4	720	81.0	0.73	2.0	1.9	6.0	110
160M2-8	5.5	7.5	12.5	720	83.0	0.74	2.0	2.0	6.0	111
160L-8	7.5	10	16.3	720	85.5	0.75	2.0	2.0	6.0	137
180L-8	11	15	23.0	730	87.5	0.76	2.0	2.0	6.6	174
200L-8	15	20	31.2	730	88.0	0.76	2.0	2.0	6.6	255
225S-8	18.5	25	37.6	730	90.0	0.76	2.0	1.9	6.6	261
225M-8	22	30	43.4	730	90.5	0.78	2.0	1.9	6.6	287
250M-8	30	40	58.1	735	91.0	0.79	2.0	1.9	6.6	405
280S-8	37	50	71.2	735	91.5	0.79	2.0	1.9	6.6	497
280M-8	45	60	86.1	735	92.0	0.79	2.0	1.8	6.6	556
315S-8	55	75	102	735	92.8	0.81	2.0	1.8	6.6	918
315M-8	75	100	138	735	93.0	0.81	2.0	1.8	6.6	1055
315L1-8	90	125	163	735	93.8	0.82	2.0	1.8	6.6	1100
315L2-8	110	150	198	735	94.0	0.82	2.0	1.8	6.4	1140
355M1-8	132	175	239	740	93.7	0.82	2.0	1.8	6.4	1689
355M2-8	160	220	288	740	94.2	0.82	2.0	1.8	6.4	2048
355L-8	200	270	355	740	94.5	0.83	2.0	1.8	6.4	2560

OVERALL AND MOUNTING DIMENSIONS (FOR ESTIMATING ONLY)



Frame	Poles	Mounting Dimension (mm)													Contour Dimension (mm)											
		H	A	B	C	D	E	F	G	GD	K	M	N	P	S	T	AB	AC	AD	AA	BB	HA	HD	L	LA	
63	2,4	63	100	80	40	11	23	4	8.5	4	7	115	95	140	10	3	135	130	70	30	130	8	160	225	10	
71	2,4, 6	71	112	90	45	14	30	5	11	5	7	130	110	160	10	3.5	150	145	80	30	140	8	195	250	10	
80	2, 4, 6, 8	80	125	100	50	19	40	6	15.5	6	10	165	130	200	12	3.5	165	175	145	34	130	10	214	295	12	
90S		90	140	100	56	24	50	8	20	7	10	165	130	200	12	3.5	180	195	155	36	140	12	250	315	12	
90L		90	140	125	56	24	50	8	20	7	10	165	130	200	12	3.5	180	195	155	36	165	12	250	340	13	
100L		100	160	140	63	28	60	8	24	7	12	215	180	250	15	4	205	215	180	40	180	14	270	385	14	
112M		112	190	140	70	28	60	8	24	7	12	215	180	250	15	4	230	240	190	45	180	15	300	400	14	
132S		132	216	140	89	38	80	10	33	8	12	265	230	300	15	4	265	275	210	55	190	18	345	470	14	
132M		132	216	178	89	38	80	10	33	8	12	265	230	300	15	4	265	275	210	55	230	18	345	510	15	
160M		160	254	210	108	42	110	12	37	8	15	300	250	350	19	5	320	330	255	65	260	20	420	615	15	
160L		160	254	254	108	42	110	12	37	8	15	300	250	350	19	5	320	330	255	65	305	20	420	670	15	
180M		180	279	241	121	48	110	14	42.5	9	15	300	250	350	19	5	355	380	280	70	315	22	455	700	17	
180L		180	279	279	121	48	110	14	42.5	9	15	300	250	350	19	5	355	380	280	70	355	22	455	740	20	
200L		200	318	305	133	55	110	16	49	10	19	350	300	400	19	5	395	410	305	70	375	25	505	770	20	
225S	4, 8	225	356	286	149	60	140	18	53	11	19	400	350	450	19	5	435	460	335	75	375	28	555	815	20	
225M	2	225	356	311	149	55	110	16	49	10	19	400	350	450	19	5	435	460	335	75	400	28	555	820	22	
225M	4, 6, 8	225	356	311	149	60	140	18	53	11	19	400	350	450	19	5	435	460	335	75	400	28	555	845	22	
250M	2	250	406	349	168	60	140	18	53	11	24	500	450	550	19	5	490	510	365	80	445	30	615	915	22	
250M	4, 6, 8	250	406	349	168	65	140	18	58	11	24	500	450	550	19	5	490	510	365	80	445	30	615	915	22	
280S	2	280	457	368	190	65	140	18	58	11	24	500	450	550	19	5	550	580	400	85	490	35	680	975	22	
280S	4, 6, 8	280	457	368	190	75	140	20	67.5	12	24	500	450	550	19	5	550	580	400	85	490	35	680	975	22	
280M	2	280	457	419	190	65	140	18	58	11	24	500	450	550	19	5	550	580	400	85	540	35	680	1025	22	
280M	4, 6, 8	280	457	419	190	75	140	20	67.5	12	24	500	450	550	19	5	550	580	400	85	540	35	680	1025	22	
315S	2	315	508	406	216	65	140	18	58	11	28	600	550	660	24	6	630	645	525	120	570	45	845	1215	22	
315S	4, 6, 8, 10	315	508	406	216	80	170	22	71	14	28	600	550	660	24	6	630	645	525	120	570	45	845	1215	22	
315M	2	315	508	457	216	65	140	18	58	11	28	600	550	660	24	6	630	645	525	120	680	45	845	1325	22	
315M	4, 6, 8, 10	315	508	457	216	80	170	22	71	14	28	600	550	660	24	6	630	645	525	120	680	45	845	1325	22	
315L	2	315	508	508	216	65	140	18	58	11	28	600	550	660	24	6	630	645	525	120	680	45	845	1325	22	
315L	4, 6, 8, 10	315	508	508	216	80	170	22	71	14	28	600	550	660	24	6	630	645	525	120	680	45	845	1325	22	
355M	2	355	610	560	254	75	140	20	67.5	12	28	650	680	800	24	6	730	710	655	116	680	52	1010	1495	25	
355M	4, 6, 8, 10	355	610	560	254	95	170	25	86	14	28	650	680	800	24	6	730	710	655	116	760	52	1010	1525	25	
355L	2	355	610	630	254	75	140	20	67.5	12	28	650	680	800	24	6	730	710	655	116	760	52	1010	1495	25	
355L	4, 6, 8, 10	355	610	630	254	95	170	25	86	14	28	650	680	800	24	6	730	710	655	116	760	52	1010	1525	25	

Note : 1. The figure is of B35 type. There are frame feet and flange.

2. B3 type motors have frame but no flange, the dimensions have no. M,N,P,S,T and LA

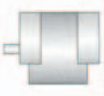
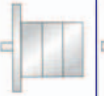
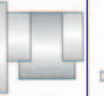
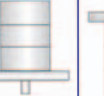
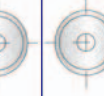
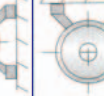
3. B5 Type motors have flange but no frame feet, the dimensions have no. A, B C, AB, BB, HA and K

4. H63-90 without lifting bolts.

Mounting Arrangements

The Commonly used mounting arrangements and corresponding frame numbers are shown in table 1

Table 1

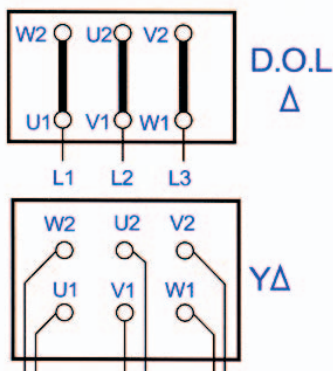
Mounting	Basic			Variations								
	B3	B5	B35	Based on B5		Based on B3					Based on B35	
				V1	V3	V5	V6	B6	B7	B8	V15	V36
												
Frame	63-355	63-280	63-355	63-355	← 63-180 →							

Bearings

Frame	2-Pole		4,6,8-Pole	
	Driving End	Non-Driving End	Driving End	Non-Driving End
63	6201ZZ	6201ZZ	6201ZZ	6201ZZ
71	6202ZZ	6202ZZ	6202ZZ	6202ZZ
80	6204ZZ	6204ZZ	6204ZZ	6204ZZ
90	6205ZZ	6205ZZ	6205ZZ	6205ZZ
100	6206ZZ	6206ZZ	6206ZZ	6206ZZ
112	6206ZZ	6206ZZ	6206ZZ	6206ZZ
132	6208ZZ	6208ZZ	6208ZZ	6208ZZ
160	6209	6209	6309	6309
180	6211	6211	6311	6311
200	6212	6212	6312	6312
225	6212	6212	6313	6313
250	6313	6313	6314	6314
280	6314	6314	6317	6317
315	6317	6317	N319	6319
355	6319	6319	N322	6322

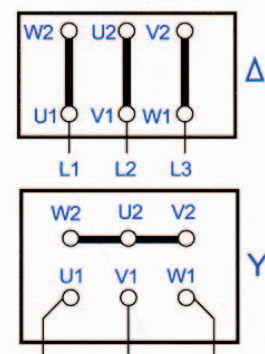
Connection Diagrams

Star Delta



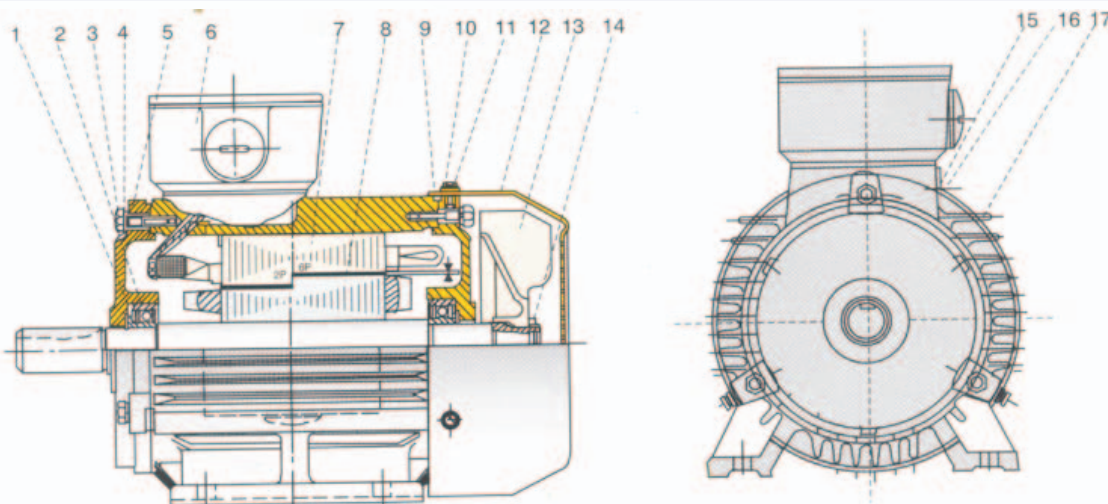
Motors of 3kW and above

Dual Voltage Δ / Y



Motors of 2.2kW and below

MATERIAL LIST



Item	Description	Item	Description	Item	Description
1	Wave-form Washer	7	Stator Pack With Winding	13	Fan
2	Bearing	8	Rotor	14	Circlip
3	Bolt	9	NDE Shield	15	Rivet
4	Spring Washer	10	Screw	16	Nameplate
5	DE shields	11	Washer	17	Frame
6	Terminal Box	12	Fan Cowl		

OPERATING CONDITION

Type	Three phase squirrel cage induction motor
Enclosure	Totally - Enclosed Fan Cooled
Voltage $\pm$ variation	415 $\pm$ 6%
Frequency $\pm$ variation	50HZ +5%
Combined variation	10% (Absolute Sum)
Altitude	Up to 1000M
Relative Humidity	Up to 100%
Degree Of Protection	IP55
Class Of Insulation	Class F
Ambient Temperature	45°C
Service Factor	1.15
Duty	S1 / Continuous
Position of Terminal Box Connection	Top at Drive End Up to 3 kw - Star >4 kw - Delta
No. of leads	3 / 6 leads for STAR / DELTA
Direction Of Rotation	Bi - directional
Cooling	IC 01 41 (TEFC)

Imported By



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