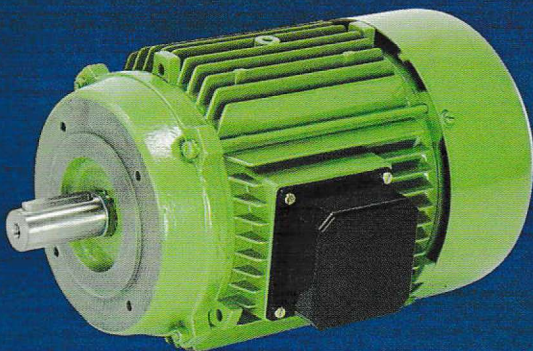
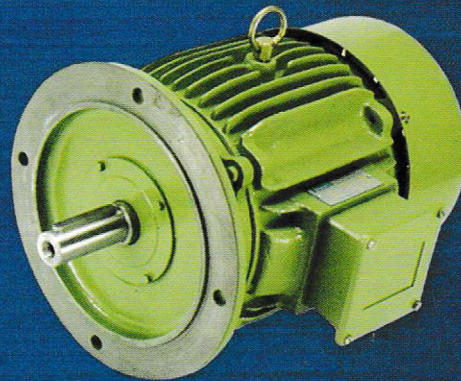
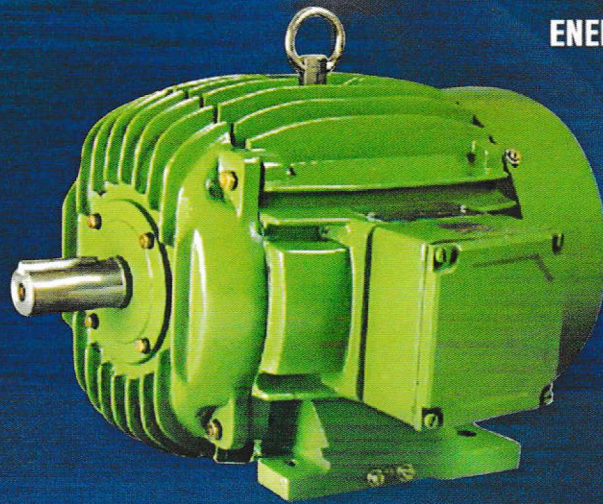




ENERGY EFFICIENT ELECTRIC MOTORS



IE2 IE3

STARK INDUSTRIES an ISO 9001-2008 company established in 1988, is one of the leading manufacturers of AC Induction Motors. The motors are compact, reliable and robust, suitable for variety of applications like machine tools, textiles, air-conditioning, fans, compressors, cranes, crushers, pumps, dairy equipments, material handling, aquaculture, agriculture and chemical industries etc. The range of products are standard motors, Brake motors, Energy efficient motors, crane duty motors, Dual speed motors and other special motors as per customer's specification. Quality of the product is achieved by a team of highly dedicated, experienced and trained personnel and well defined documented procedures. Stark Industries meets the exact requirements of modern industries to achieve higher performance and more reliability.

SALIENT FEATURES - STANDARD MOTORS

- Castings for body frame end shields, bearing shields etc., are made out of quality graded grey iron casting which assures fairly long years of utility.
- Pressure die-cast aluminium body for frame 63 to 180L also available.
- 63 - 90 frame terminal box position is on top side. For other frames terminal box position will be at right hand side, when viewed from the drive end. Terminal box on left hand side can be given on request. Terminal box can be rotated in a step of 90° through 360° for desired direction of cable entries. All terminal boxes are designed for maximum space for ease of connection.
- All motors shafts are EN 8 material. Motor shaft with AISI 304 (non magnetic) 316, 410 and other materials can be supplied on request. Shafts are having threaded center hole for locking of pulley/gear driving end. Motors are supplied with keys duly fitted on the shaft.
- All motors are supplied with 'B' class insulation. Insulation class 'F' and class 'H' can be given on request.
- All standard motors are capable for service factor 1.1 at rated voltage and frequency for continuous duty.
- Rotors are of squirrel cage, aluminium diecast and are dynamically balanced with a half key to keep the vibration levels very low.
- Core materials is with low loss high grade silicon steel.
- Windings are wound with Polyester enameled 'F' class wire & impregnated with thermo setting by varnishing oven.
- All motors are suitable to 415V +/- 10%, 50Hz +/- 5% & combined +/- 10% variations unless otherwise specified.
- All motors can withstand momentary overload of 1.6 times of rated torque, for 15 seconds without stalling.
- Motors are designed for continuous duty at an ambient temp 40°C.
- Thermistors (PTC) can be provided on request to avoid single phasing and over heating due to excess load on the motor.
- Cable gland suitable 3/4" to 1" with B.S. conduit threadings. Other type of entries can be given on request.
- All standard motors are having deep groove ball bearings. Deep groove ball bearings are capable of taking axial loads in both the direction in addition to the radial loads at high speeds.
- Bearings are double shielded and are adequately with lithium based high temp. (up to 120° C) grease. Therefore no relubrication required. Life of the bearing is normally 15000 to 25000 working hours depending upon operating conditions.
- Oil seals are provided to ensure IP 55 protection.
- Noise level of the motors are maintained as per specification IS : 12065
- Motors are tested for vibration level of normal class as per IS : 12075:

CRANE DUTY MOTORS

Ideal for frequent starts / stops & reversing operations in material handling, lifts, cranes, hoists & rolling mills.

Motors are suitable for

Short time duty (S2) ♦ Intermittent periodic duty (S3) ♦ Intermittent duty with starting (S4) ♦ Intermittent duty with starting & electrical Braking (S5)

BRAKE MOTORS

Simple construction and installation. The operation of the brake is 'Fail safe Type' i.e NORMALLY ON. The brake is applied when the power to the motor is cut OFF or if power failure occurs. Being a simple and robust construction, these motors need little maintenance. In case of failure it can be repaired easily and quickly. Special Brake liners are used to ensure that the braking torque remains constant throughout the use. Compensation for liner wear is very simple. Also the torque adjustment is very easy.

- Manual release is provided for brakes up to 160 frame. In case of power failure or in case of motor maintenance the manual release can be pushed back for releasing the brake for rotating shaft. Dust protecting seal is provided for protection of brake liners from dust. The switching time of the brake motor is very fast almost instantaneously.
- The brake motor is provided with the rectifier unit, therefore no separate DC supply is necessary for energizing the brake coil. Varistor is provided across the D.C. terminals to protect brake coil and rectifier against line and induced voltages, due to switching.
- NORMALLY OFF type brakes can also be offered on request. These type of brakes are very compact in design and have operating reliability. The line are made up of special friction material and the brake is almost maintenance Free.
- AC fail safe, pneumatic type brake motors can be offered on request.
- Braking torque depends upon output rating and speed of the motor. Hence customers are requested to give the exact application of the motor for selecting the correct brake size.

SINGLE PHASE MOTORS

- CS & R (Capacitor Start and Run), CSIR (Capacitor Start Induction Run), CSCR (Capacitor Start Capacitor Run)
- Voltage range 230V +/- 10% Frequency 50HZ +/- 5% combined +/- 10%
- Motors TEFC construction with IP protection.
- Centrifugal switch designed for free operation with bimetal silver contacts to prevent the arc formation.
- Capacitor start and induction run motors have starting torque which are suitable for machine tools, small compressors, booster pumps, atta chakki etc, where frequent start / stop and high load inertia is involved.
- Synchronous speed 750 rpm can be given in CS & R type.
- Special shaft extension / double ended shaft can be given.
- All other features similar to standard motors.

FRAME SIZE OF STARK SINGLE PHASE INDUCTION MOTORS

KW	HP	3000 RPM	CS & R		CSIR / CSCR		
			1500 RPM	960 RPM	3000 RPM	1500 RPM	960 RPM
0.09	0.125	56	56	63	...	...	...
0.12	0.16	56	63	63	...	...	...
0.18	0.25	63	71	71	...	...	...
0.25	0.33	71/63	71	71	...	...	...
0.37	0.5	71	71/80	80	80	80	80
0.55	0.75	71/80	80	90L	80	80	90L
0.75	1.0	80	90S	100L	90L	90L	100L
1.1	1.5	90S	100L	100L	90L	100L	112M
1.5	2.0	90S	100L	112M	90L	100L	112M
2.2	3.0	100	...	...	100	112M	...

ENERGY SAVING LOOM MOTORS

- ◀ Energy saving loom motors are suitable 415V +/- 10%
- ◀ Designed as per IS : 2972 Part - 1
- ◀ Frame & End shield construction in Cast iron for robust and non vibrating design.
- ◀ Shafts are made out of EN 8 Steel
- ◀ Special rotors which are dynamically balanced.
- ◀ Totally enclosed surface cooling. Weather proof to resist moisture.
- ◀ Specially designed with high starting torque and pull out torque and to withstand irregular and intermittent operation.
- ◀ Range 0.25 KW (0.33HP) to 2.2 KW (3 HP) Speed : 750, 1000 RPM Frame : 90S-132M.

ELECTRICAL PERFORMANCE CONFIRM TO IS : 8789-1996

2 POLE MOTORS

Frame	Output		Rated Current Amps	Rated RPM	P.F	EFF %	Ist IR	Ist TR %	Tpo TR %	Gd ² kgm ²
	KW	HP								
56	0.02	0.026	0.25	2670	0.58	50	3.6	180	200	0.0002
56	0.04	0.053	0.3	2680	0.6	52	3.2	190	210	0.0003
56	0.09	0.125	0.4	2700	0.62	55	3.6	200	230	0.0004
56	0.12	0.16	0.5	2700	0.65	60	3.8	200	240	0.0005
63	0.18	0.25	0.6	2700	0.7	60	4.0	210	250	0.0008
71	0.25	0.33	0.8	2750	0.73	65	4.0	210	260	0.0010
71	0.37	0.5	1.05	2790	0.76	67	4.2	220	260	0.0016
80	0.55	0.75	1.4	2820	0.78	72	5.0	220	270	0.002
80	0.75	1.0	1.8	2820	0.8	75	5.1	230	280	0.004
90S	1.1	1.5	2.6	2840	0.82	77	5.2	230	280	0.0065
90S	1.5	2.0	3.2	2840	0.83	79	5.3	250	300	0.007
90L	2.2	3.0	5.0	2840	0.83	80	5.4	250	290	0.009
100L	2.2	3.0	4.5	2850	0.83	82	5.4	260	300	0.015
112M	3.7	5.0	7.3	2880	0.86	84	7.2	240	280	0.030
132S	5.5	7.5	10.5	2880	0.87	84	7.2	230	270	0.072
132S	7.5	10.0	14.5	2900	0.88	85	6.5	230	280	0.080
160M	9.3	12.5	18.0	2920	0.88	86	6.6	240	270	0.142
160M	11.0	15.0	20.0	2920	0.88	88	6.7	200	240	0.172
160M	15.0	20.0	27.0	2920	0.88	88	6.8	200	240	0.21
160L	18.5	25.5	33.0	2930	0.89	90	6.6	200	230	0.26
180M	22.0	30.0	39.0	2930	0.90	90	6.6	220	260	0.38

4 POLE MOTORS

Frame	Output		Rated Current Amps	Rated RPM	P.F	EFF %	Ist IR	Ist TR %	Tpo TR %	Gd ² kgm ²
	KW	HP								
56	0.02	0.026	0.28	1280	0.50	45	2.0	170	190	0.0005
56	0.04	0.053	0.3	1300	0.51	46	2.1	170	195	0.0006
56	0.09	0.12	0.45	1310	0.52	50	2.2	180	200	0.0007
56	0.12	0.16	0.55	1320	0.55	50	2.5	180	210	0.0013
63	0.16	0.25	0.7	1330	0.65	55	2.8	200	230	0.0017
71	0.25	0.33	1.0	1350	0.66	60	3.0	210	240	0.003
71	0.37	0.5	1.2	1370	0.66	65	3.3	220	260	0.0037
80	0.55	0.75	1.5	1400	0.68	72	3.6	230	270	0.006
80	0.75	1.0	2.0	1400	0.70	75	3.8	240	280	0.008
90S	1.1	1.5	2.7	1410	0.72	76	4.5	250	280	0.014
90L	1.5	2.0	3.5	1410	0.76	78	4.5	250	290	0.017
100L	2.2	3.0	4.8	1420	0.79	81	5.8	240	290	0.029
112M	3.7	5.0	7.5	1440	0.82	83	6.0	240	290	0.062
132S	5.5	7.5	11.0	1440	0.82	85	6.0	230	270	0.114
132M	7.5	10.0	15.0	1440	0.84	85	6.2	220	260	0.145
160M	9.3	12.0	18.0	1440	0.84	87	5.8	200	250	0.235
160M	11.0	15.0	20.5	1450	0.85	89	6.0	200	230	0.28
160L	15.0	20.0	28.0	1450	0.85	89	6.0	200	250	0.38
180M	18.5	25.0	34.0	1460	0.86	90	6.2	200	240	0.64
180L	22.0	30.0	40.0	1460	0.87	90	6.2	200	230	0.75

6 POLE MOTORS

Frame	Output		Rated Current Amps	Rated RPM	P.F	EFF %	Ist IR	Ist TR %	Tpo TR %	Gd ² kgm ²
	KW	HP								
71	0.09	0.125	0.55	850	0.55	48	2.0	160	180	0.002
71	0.12	0.16	0.6	870	0.58	49	2.2	170	200	0.0025
71	0.18	0.25	0.85	900	0.60	50	2.3	180	200	0.003
71	0.25	0.33	0.95	900	0.65	55	2.5	180	210	0.004
80	0.37	0.5	1.2	910	0.68	67	2.8	190	210	0.007
80	0.55	0.75	1.6	910	0.7	69	3.0	190	220	0.010
90S	0.75	1.0	1.9	920	0.73	73	3.3	200	240	0.020
90L	1.1	1.5	2.8	920	0.74	75	3.5	200	220	0.026
100L	1.5	2.0	3.8	925	0.75	76	4.5	210	240	0.04
112M	2.2	3.0	4.8	925	0.79	80	5.0	210	240	0.072
132S	3.7	5.0	7.8	950	0.80	84	5.2	210	240	0.145
132M	5.5	7.5	12.0	955	0.80	84	5.4	200	230	0.215
160M	7.5	10.0	16.0	960	0.81	86	5.5	200	220	0.375
160L	9.3	12.5	19.0	960	0.82	87	5.5	200	220	0.425
160L	11.0	15.0	22.0	960	0.82	87	5.5	200	220	0.510
180L	15.0	20.0	30.0	960	0.83	88	5.8	200	230	0.95

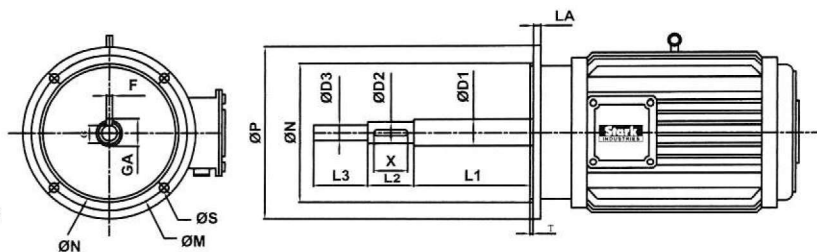
8 POLE MOTORS

Frame	Output		Rated Current Amps	Rated RPM	P.F	EFF %	Ist IR	Ist TR %	Tpo TR %	Gd ² kgm ²
	KW	HP								
80	0.18	0.25	1.0	680	0.55	55	3.07	170	190	0.008
80	0.25	0.33	1.2	690	0.58	59	3.0	170	200	0.010
90S	0.37	0.5	1.5	690	0.60	63	3.3	180	210	0.019
90L	0.55	0.75	2.0	700	0.61	68	3.5	190	220	0.026
100L	0.75	1.0	2.7	700	0.64	69	3.5	200	220	0.036
100L	1.1	1.5	3.5	700	0.66	70	3.8	200	230	0.045
112M	1.5	2.0	4.5	710	0.7	73	4.0	200	220	0.088
132S	2.2	3.0	6.0	710	0.72	75	4.0	180	200	0.165
132M	3.7	5.0	9.5	710	0.74	78	4.5	180	200	0.25
160M	5.5	7.5	14.0	710	0.76	80	4.8	190	210	0.44
160L	7.5	10.0	19.0	720	0.77	82	5.0	200	230	0.58
180M	9.3	12.5	23.0	720	0.82	82	5.5	200	220	0.82
180L	11.0	15.0	26.0	720	0.84	84	5.5	200	240	0.98

COOLING TOWER MOTORS

- ☐ Mounting V1 (Shaft downward position)
- ☐ Shaft is supplied with stainless steel AISI-410 grade material.
- ☐ Relative Humidity 90%
- ☐ Flange B5 as per IS 2293
- ☐ All other features similar to standard motors.

Any other requirements such as mounting, special construction, thrust bearing arrangement, special shaft extension and supply voltage frequency can be available on request at extra cost.



FRAME	M±0.3	N.J6	P	S	T	LA	Φ D1	Φ D2	Φ D3	L1	L2	L3	F	G	GA	X
71	130	110	160	10	3.5	9	17	14j6	M12	75	30	35	5	11	16	22
80	165	130	200	12	3.5	10	20	19j6	M16	80	55	50	6	15.5	21.5	45
90S	165	130	200	12	3.5	10	30	24j6	M20	80	55	50	8	20	27	45
90L	165	130	200	12	3.5	10	30	24j6	M20	80	55	50	8	20	27	45
100L	215	180	250	15	4.0	11	30	28j6	M24	80	55	50	8	24	31	45
112M	215	180	250	15	4.0	11	30	28j6	M24	80	55	50	8	24	31	45
132S	265	230	300	15	4.0	12	40	38k6	M30	104	104	55	10	33	33	65
160M	300	250	350	19	5.0	13	50	42k6	M30	100	100	50	12	37	37	65
160L	300	250	350	19	5.0	13	50	42k6	M30	100	100	50	12	37	37	65

NON STANDARD & SPECIAL PURPOSE MOTORS

Electrical variants

1. Non Standard voltage and frequency variation
2. Dual voltage (1:2 or 1: 3 Ratio)
3. Invertor fed supplies and AC variable speed drives.
4. Dual speed motors.
5. Torque motors.
6. High frequency motors
7. Textile motors.
8. Special performance requirements.
9. Motor with Amb. temp. upto 60°C

Mechanical variants

1. Non standard mounting Dimensions.
2. Double shaft extension.
3. Special shaft extension.
4. Non standard paint shade.
5. Low vibration & noise motors.
6. Special shaft material.

MOUNTING ARRANGEMENTS

Motors are suitable for mounting in horizontal & vertical position.

Horizontal mounting position B3, B5, B6, B7, B8, B14, B35 & B34.

Vertical mounting positions - V1, V3, V5, V6, V1 & V19

TYPE OF ENCLOSURE

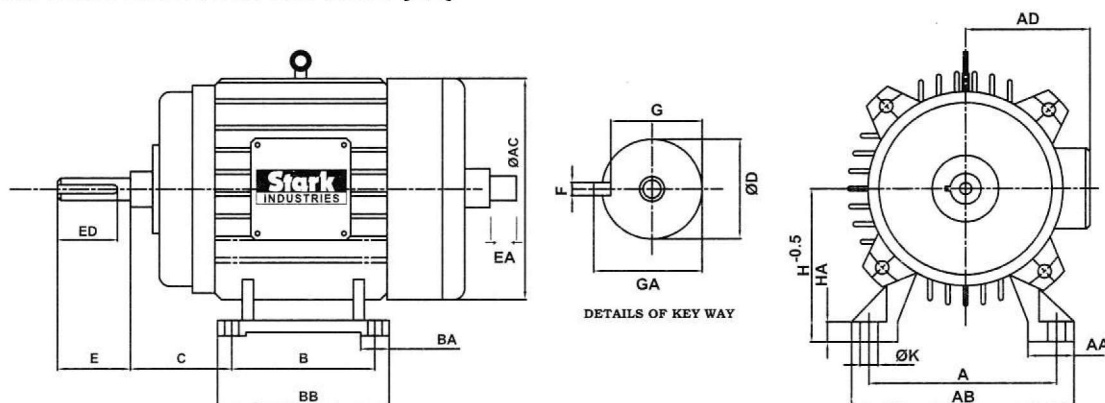
All motors are with totally enclosed fan cooled (TEFC) type enclosure. However totally naturally cooled & Air over motors can be supplied on request. Motors suitable to IP 44, IP 54 & IP 55 protection can be supplied.

FRAME SIZE OF STARK THREE PHASE INDUCTION MOTORS

KW	H.P.	FRAME SIZE						
		3000 RPM Syn. Speed	1500 Rpm Syn. Speed	1000 Rpm Syn. Speed	750 Rpm Syn. Speed	600 Rpm Syn. Speed	500 Rpm Syn. Speed	375 Rpm Syn. Speed
0.02	0.026	56	56	--	--	--	--	--
0.04	0.053	56	56	--	--	--	--	--
0.09	0.125	56	56	--	--	--	--	--
0.18	0.25	63	63	71	80	90S	90L	100
0.25	0.33	63/71	71	71	80	90L	100L	100
0.37	0.5	71	71	80	90S	90L	100L	112M
0.55	0.75	71/80	80	80	90L	100L	100L	112M
0.75	1.0	80	80	90S	100L	112M	100L	132S
1.1	1.5	80/90S	80/90S	90L	100L	112M	112M	132M
1.5	2.0	90S	90L	100L	112M	132S	132S	160M
2.2	3.0	90L/100L	100L	112M	132S	132M	132M	160M
3.0	4.0	100L	100L	112M	132M	160M	160L	160L
3.7	5.0	100L/112M	112M	132S	132M	160M	160L	160L
5.5	7.5	132S/112 M	132S	132M	160M	160L	180M	180M
7.5	10.0	132S	132M	160M	160L	180M	180L	180L
9.3	12.5	132M/160M	160M	160L	180M	180L	--	--
11.0	15.0	160M / 132M	160M	160L	180L	--	--	--
15.0	20.0	160M	160L	180L	--	--	--	--
18.5	25.0	160L	180M	--	--	--	--	--
22.0	30.0	180M	180L	--	--	--	--	--

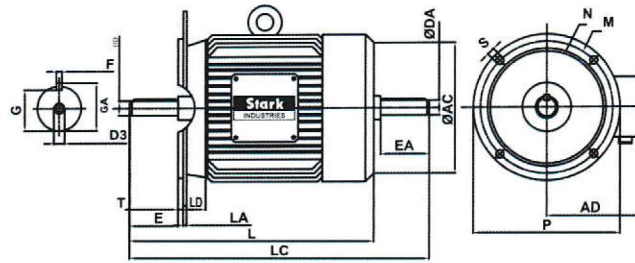
Note : Custom build motors can be offered against specific enquiry.

DIMENSIONS OF FOOT MOUNTED MOTORS (B3)



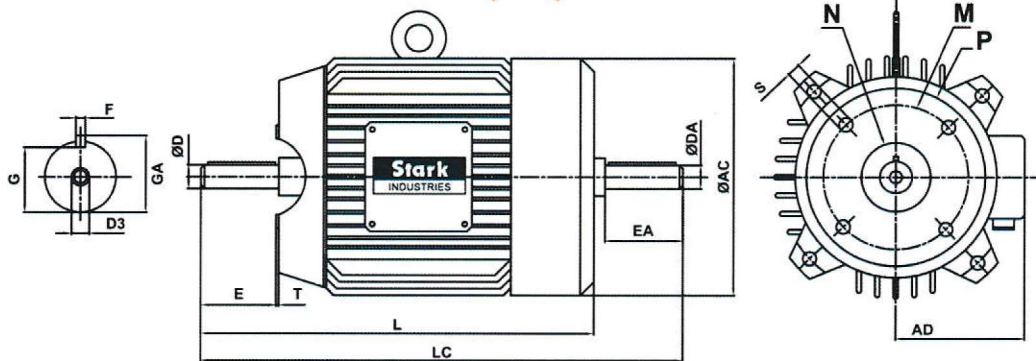
FRAME SIZE	A	B	C	D,DA	E,EA	ED	F,FA	G	H	K	L	AB	AD	BB	GA,GC	D3
SI 56	90	71	36	9j6	20	16	3	7.2	56	5.6	190	112	-	98	10.2	M 3
SI 63	100	80	40	11j6	23	18	4	8.5	63	7	200	130	-	110	12.5	M 4
SI 71	112	90	45	14j6	30	22	5	11.0	71	7	235	142	-	130	16	M 5
SI 80	125	100	50	19j6	40	28	6	15.5	80	10	272	155	122	130	21.5	M 6
SI 90S	140	100	56	24j6	50	40	8	20	90	10	290	170	133	155	27	M 8
SI 90L	140	125	56	24j6	50	40	8	20	90	10	315	170	133	155	27	M 8
SI 100L	160	140	63	28j6	60	50	8	24	100	12	360	195	146	170	31	M 8
SI 112M	190	140	70	28j6	60	50	8	24	112	12	385	230	170	175	31	M 8
SI 132S	216	140	89	38k6	80	70	10	33	132	12	438	265	189	180	41	M 12
SI 132M	216	178	89	38k6	80	70	10	33	132	12	478	265	189	225	41	M 12
SI 160M	254	210	108	42k6	110	100	12	37	160	12	580	320	240	260	45	M 16
SI 160L	254	254	108	42k6	110	100	12	37	160	12	624	320	240	310	45	M 16
SI 180M	279	241	121	48k6	110	100	14	42.5	180	15	677	348	-	286	51.5	M 16
SI 180L	279	279	121	48k6	110	100	14	42.5	180	15	715	348	-	323	51.5	M 16

DIMENSIONS OF FLANGE MOUNTED 'B' TYPE MOTORS (B5)



Frame	Flange	M ^{+0.3}	N	P MAX	S	T-	E,EA	LA	LD MIN	L	AD	AC	D,DA	F,FA	GA,GL	G,GB	D3
SI 63	F115B	115	95j6	140	10	3.0	23	9	16	200	102	124	11j6	4	12.5	8.5	M 4
SI 71	F130B	130	110j6	160	10	3.5	30	9	16	235	110	140	14j6	5	16	11	M 5
SI 80	F165B	165	130j6	200	12	3.5	40	10	20	272	122	156	19j6	6	21.5	15.5	M 6
SI 90S	F165B	165	130j6	200	12	3.5	50	10	20	290	133	176	24j6	8	27	20	M 8
SI 90L	F165B	165	130j6	200	12	3.5	50	10	20	315	133	176	24j6	8	27	20	M 8
SI 100L	F215B	215	180j6	250	15	4.0	60	11	24	360	146	212	28j6	8	31	24	M 8
SI 112M	F215B	215	180j6	250	15	4.0	60	11	24	385	170	234	28j6	8	31	24	M 8
SI 132S	F265B	265	230j6	300	15	4.0	80	12	24	438	189	265	38k6	10	41	33	M 12
SI 132M	F265B	265	230j6	300	15	4.0	80	12	24	478	189	265	38k6	10	41	33	M 12
SI 160M	F300	300	250j6	350	19	5.0	110	13	30	580	240	310	42k6	12	45	37	M 16
SI 160L	F300B	300	250j6	350	19	5.0	110	13	20	620	240	310	42k6	12	45	37	M 16
SI 180M	F300B	300	250j6	350	19	5.0	110	13	38	291	242	310	48k6	14	51.5	42.5	M 16

DIMENSIONS OF FACE MOUNTED 'C' TYPE MOTORS (B14)



Frame	Flange	M ^{+0.3}	N	P MAX	S	T-	E,EA	F,FA	GA GL	D,DA	L	LC	AD	AC	G,GB	D3
SI 63	F 75C	75	60j6	90	M5X6	2.5	23	4	12.5	11j6	200	228	102	124	8.5	M 4
SI 71	F 85C	85	70j6	105	M6X8	2.5	30	5	16	14j6	235	270	110	140	11	M 5
SI 80	F 100C	100	80j6	120	M6X8	3.0	40	6	21.5	19j6	272	317	122	156	15.5	M 6
SI 90S	F 115C	115	95j6	140	M8X10	3.0	50	8	27	24j6	290	345	133	176	20	M 8
SI 90L	F 115C	115	95j6	140	M8X10	3.0	50	8	27	24j6	315	370	133	176	20	M 8
SI 100L	F 130C	130	110j6	160	M8X10	3.5	60	8	31	28j6	360	425	146	212	24	M 8
SI 112M	F 130C	130	110j6	160	M8X10	3.5	60	8	31	28j6	385	450	170	234	24	M 8
SI 132S	F 165C	165	130j6	200	M10X12	3.5	80	10	41	38j6	438	523	189	265	33	M 12

APPLICABLE STANDARDS

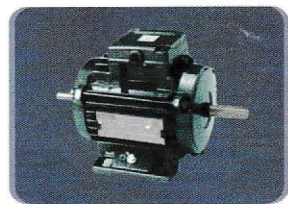
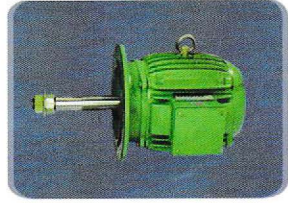
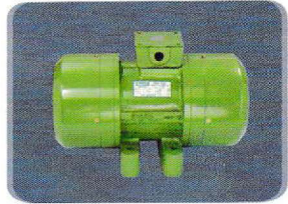
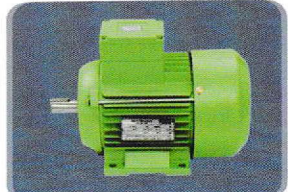
All standard motors comply with the requirements stipulated in IS325-1996

The manual make reference to the following Indian standard for constructional details and performance.

- IS 325 : Specification for three phase induction motors.
- IS 1231 : Dimensions of three phase foot mounted induction motors.
- IS 2223 : Dimensions of flange mounted AC induction motors.
- IS 2253 : Designations for types of construction and mounting arrangements of rotating electrical machines.
- IS 8789 : Values of performance characteristics for three phase induction motors.
- IS 4691 : Degrees of protection provided by enclosure for rotating electrical machinery.
- IS 6362 : Designation of methods of cooling for rotating electrical machinery.
- IS 4889 : Method of determination of efficiency of rotating electrical machinery.
- IS 12615 : Energy efficient induction motors - Three Phase Squirrel Cage

SHIPPING SPECIFICATIONS FOR 3 PHASE STANDARD INDUCTION MOTORS

Frame Size	Type of Packing	NET Wt. in Kgs.	Gross Wt. in Kgs.	L x B x H in MM
63	Corrugated Box	4.7	5.6	228 x 152 x 203
71	Corrugated Box	7.3	8.3	266 x 165 x 215
80	Corrugated Box	15.600	17.000	318 x 229 x 215
90S	Corrugated Box	18.250	20.500	356 x 254 x 279
90L	Corrugated Box	22.600	24.600	356 x 254 x 279
100L	Corrugated Box	31.300	34.000	406 x 305 x 254
112M	Wooden Box	42.500	51.000	457 x 305 x 254
132S	Wooden Box	62.500	72.000	584 x 381 x 330
132M	Wooden Box	77.500	87.000	635 x 381 x 330
160M	Wooden Box	133.00	175.00	660 x 482 x 457
160L	Wooden Box	160.00	200.00	711 x 482 x 457
180M	Wooden Box	235.00	280.00	813 x 559 x 483
180L	Wooden Box	270.00	310.00	838 x 559 x 483



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