TECHNO
MOTORS

Making World Better

TECHNO

Vision

Techno Industries Private Limited is committed to be a global leader by continuous innovation and producing quality Energy Efficient Products.

Mission

Our mission is to save power and be a part of building the Nation.

Values

We are committed to be ethical, transparent to all our stake holders, making the World better to live for coming generations.

CERTIFICATIONS

ISO 9001:2015 Certified

ISO 14001: 2015 Certified

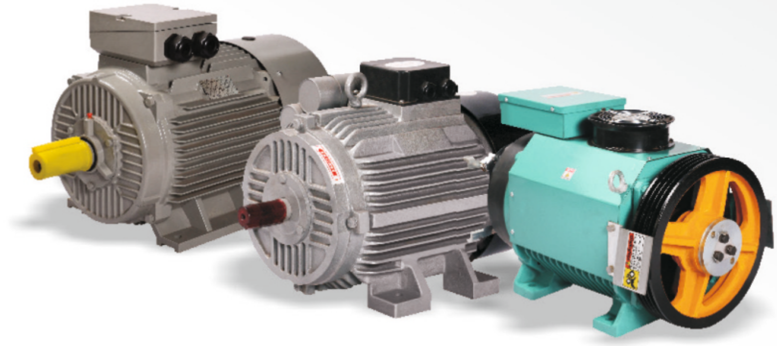
OHSAS 18001: 2007 Certified

IS : 12615 : 2011

CML No. 7200066710

ISI Certified

CE-RS-1802-2999 Certified



TECHNO INDUSTRIES PRIVATE LIMITED, established in 1984, is one of the leading Engineering Companies in India. Our works and office are situated in Ahmedabad a major business hub of Western India.

TECHNO INDUSTRIES PRIVATE LIMITED was awarded the prestigious National Award in recognition of outstanding Research & Development achievement by Government of India in 2008.

Our core strength being design & engineering, the company has been able to successfully establish Products to meet customer satisfaction across the globe in various segment, which includes, MOTORS, PUMPS & ELEVATORS.

The Company's success is its 800+ hardworking employees guided by the dynamic management team with years of industrial experience and knowledge.

Its state-of-the-art manufacturing plant and fully equipped and modern testing facilities, TECHNO INDUSTRIES PRIVATE LIMITED has been able to supply more than 6,00,000 Induction Motors for various applications and are operating satisfactorily in the field.

Our motto is to provide well defined quality solutions with fast delivery and prompt pre & after sales service to our clients.

Load Testing Capacity 500HP

TECHNO

CORE STRENGTH

Design

R&D
IN HOUSE DYE SHOP
INTERNATIONAL STANDARDS

Availibilty

Available In
IE-2 & IE-3 Version
PMSM Version

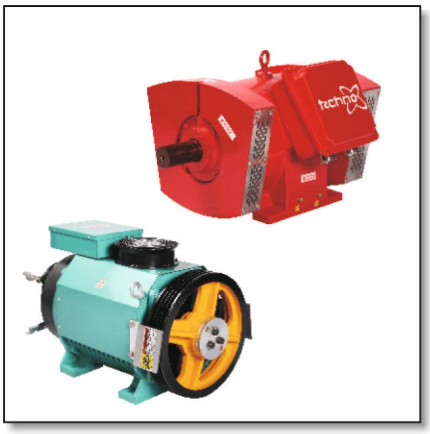
Fast Delivery

On time Fast Delivery

High Efficiency

Energy Efficient Motors
Reduce Your Energy Bill

Special Purpose Motors



Crane Duty Motors, Duel Speed Motors
PMS Motors, Vibro Motors, Servo Motors
Loom Motors & many more

Achievement

National Award Winner
In R & D

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THREE PHASE INDUCTION MOTORS

Induction Motors are being manufactured as per IS:12615-2011, it is according to international standards of IEC-60034-3-:2008.

TECHNO INDUSTRIES PRIVATE LIMITED is the first Company in India to get Star Ratings in Industrial Motors by Bureau of Energy Efficiency.

Ratings
- KW: 0.18 KW to 375 KW
- HP: 0.25 HP to 500 HP

Frame Size
- 63 to 355

Voltage Range
- 415 V +/- 10%

Frequency
- 50 Hz +/- 5%

Combined Voltage and Frequency variance
- +/- 10%

No. of Poles
- Available in 2P, 4P, 6P, 8P
- Dual speed/Voltage Motors available on specific request.

Class of Insulation
- 'F' Class with temperature rise limit to 'B' Class.

Type of enclosures
- Totally enclosed Fan Cooled (TEFC)
- Totally enclosed Surface Cooled (TESC)
- Screen Protected Drip Proof (SPDP)
- Totally Enclosed Force Cooled (TEFC)

Direction of Rotation
- Direction of Rotation: All Motors are designed for bi directional rotation.

Noise Level
- Motors are designed for noise level well below the limits specified in IS:12065 & IEC 60034-9.

Degree of Protection
- IP 54 & above In case of TEFC Motors
- IP 23 for SPDP Motors

Method of Cooling
- IC 411

Ambient Temperature
- 50° C with altitude not exceeding 1000 meters

Mounting type: (B3/B5/B6/B7/B14/V1/V3/V5/V6)
- Foot Mounting
- Flange Mounting
- Foot Cum Flange Mounting
- Wall Mounting
- Ceiling Mounting

Lifting Arrangement
- Motors with 100 Frame Size and above are provided with Lifting Hooks.

Techno Industries Pvt. Ltd. is supplying Special Purpose Motors of any specifications.

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SINGLE PHASE INDUCTION MOTORS

Single Phase Motors are used in variety of applications in households and small industrial sectors, where three phase power supply is not available. Depending upon the application load characteristics, mounting suitability and cooling mechanisms, we have single phase motors in various output powers

Ratings

- KW : 0.18 to 3.7
- HP : 0.25 to 5.0

No. of Poles

- 2P / 4P

Voltage Range

- 220 V +/- 10%

Frequency

- 50 Hz +/- 5%

Combined Variation

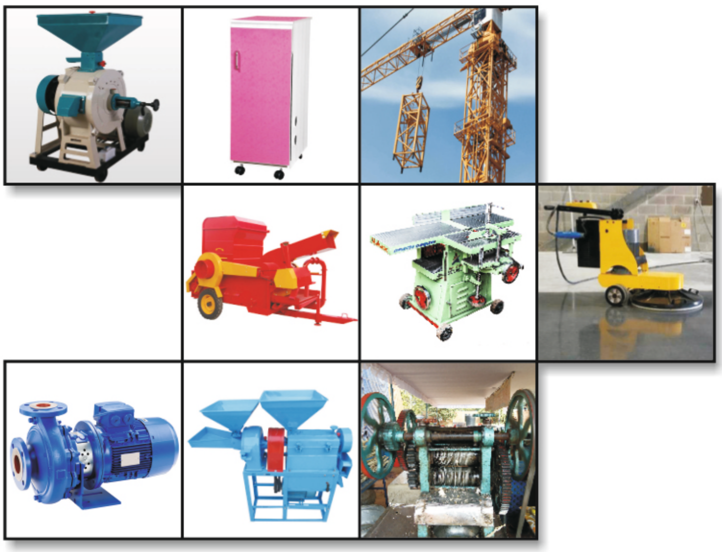
- +/- 10%

Frame Size

- 63 to 132

Application

- Atta Chakki
- Domestic Flour Mill
- Tower Hoist
- Air Compressor
- Thresher
- Wood Cutting
- Floor Polishing Machinery
- Coupled Pumps
- Rice Hullers
- Sugar cane crushers etc.



Any special requirement available on request

PERMANENT MAGNET SYNCHRONOUS MOTORS

Permanent Magnet Synchronous Motor is different from Induction Motor by way of its design of the Rotor.

In PMS motor the rotor contains strong permanent magnet that creates the magnetic field that aligns with the magnetic field of the stator and thus creates torque on the motor shaft. The amount of torque that can be produced by a permanent motor is directly proportional to strength of magnets. As the magnets of the rotor will follow the magnetic field of the stator the result is a synchronous motor.

Range

- KW :0.5 Kw to 300 KW
- HP : 0.75 HP to 400 HP

No. of Poles

- 16 to 66 Poles.

Features of PMS Motors

- High Efficiency
- High Starting Torque

Major advantages

- Maintenance free.
- Light in weight
- Easy to install.
- Compact design with high energy saving
- Almost nil vibration
- Frequent start and stops will not have any impact on motor performance.
- Permanent Magnet Synchronous Motor has almost unique power factor.

Any special requirement available on request

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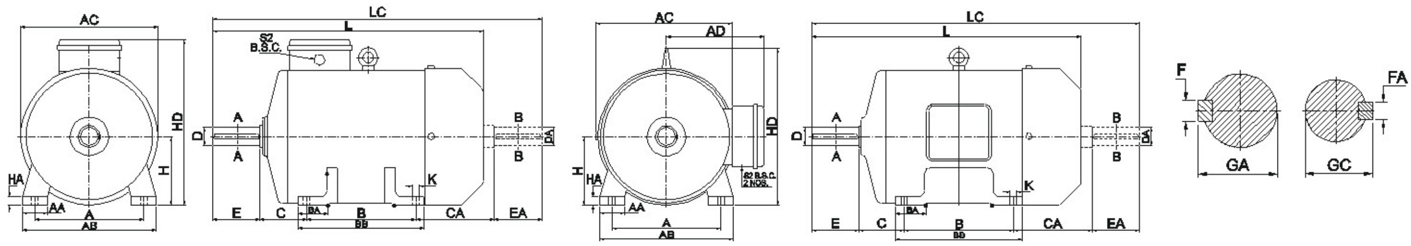
Major Components

Sr.No.	Component	Material	Remarks
1	Housing	Cast Iron / Fabricated Steel	Optimally Sized Fins for Efficient Cooling
2	Stator	Insulated Silicon Steel (CRNGO), Super Enamal Copper Wire IS:4800 Part 5 Type 2 Advanced NPN based Class 'F' insulation	Low Loss Consistency in Performance
3	Rotor	Aluminium Die Cast or Copper Strips in Insulated Silicon Steel (CRNGO)	Dynamically Balanced
4	Shaft	Carbon Steel 'EN 8'	Open Key Way
5	Endshield and Bearing Cover	Cast Iron	
6	Bearing and Lubrication	Ball / Roller Bearing and Lithium Complex based	Normal / C3 Clearance
7	Oil Seal	Synthetic Rubber	
8	Fan	Polypropylene / Aluminum Alloy	Bi-directional, Aerodynamically Designed
9	Fan Cover	Deep Drawn Steel	Lint Free Construction Available
10	Terminal Box	Aluminum / Cast Iron	IP:55 Top / RHS / LHS Rotatable in the Steps of 90°
11	Terminal Plate	Bakelite / Epoxy	Steel / Brass Stud 3/6 Terminals
12	Paint	Polyurethane	Protection Against Corrosion

Dimensions - Horizontal Foot Mounted Motors (B3 Construction) All Dimensions in mm



FRAME	A	B	C	H	K	AB	BB	AA	BA	HA	HD	L	LC	CA	AC	AD	S2 B.S.C	D/DA	E/EA	F/FA	GA/GC
EN 63	100	80	40	63	7	123	100	28	30	8	180	210	248	82	127	-	3/4"	11	23	4	12.5
EN 71	112	90	45	71	7	142	110	30	35	10	190	238	283	88	142	-	3/4"	14	30	5	16
EN 80	125	100	50	80	10	155	130	35	40	12	200	280	338	108	160	-	3/4"	19	40	6	21.5
EN 90S	140	100	56	90	10	175	130	40	45	15	215	300	368	112	186	-	3/4"	24	50	8	27
EN 90L	140	125	56	90	10	175	155	40	45	15	215	325	393	112	186	-	3/4"	24	50	8	27
EN 100L	160	140	63	100	12	200	170	45	48	17	245	375	453	130	195	-	1"	28	60	8	31
EN 112M	190	140	70	112	12	230	180	45	48	17	265	400	478	148	225	-	1"	28	60	8	31
EN 132S	216	140	89	132	12	275	180	62	56	18	305	465	565	176	245	-	1"	38	80	10	41
EN 132M	216	178	89	132	12	275	215	62	56	18	305	505	605	178	245	-	1"	38	80	10	41
EN 160M	254	210	108	160	15	315	255	75	80	20	395	590	720	182	320	-	1"	42	110	12	45
EN 160L	254	254	108	160	15	315	300	75	80	20	395	655	785	203	320	-	1"	42	110	12	45
EN 180M	279	241	121	180	15	345	280	75	85	25	435	640	770	188	360	-	1½"	48	110	14	51.5
EN 180L	279	279	121	180	15	345	320	75	85	25	435	675	805	185	360	-	2"	48	110	14	51.5
EN 200L	318	305	133	200	19	405	375	80	95	25	485	765	895	237	400	-	2"	55	110	16	59
EN 225M	356	311	149	225	19	440	380	85	100	30	530	835	965	285	450	335	2"	55	110	16	59
												865	1025	745				60	140	18	64
EN 250M	406	349	168	250	24	490	425	92	115	30	560	980	1140	343	460	355	2"	60	140	18	64
																		65	140	18	69
EN 280M	457	419	190	280	24	545	500	100	115	35	620	1060	1220	331	520	380	2"	65	140	18	69
																		75	140	20	79.5
EN 315M	508	457	216	315	28	625	540	120	120	40	700	1150	1310	357	620	425	2"	65	140	18	69
												1180	1370					80	170	22	85
EN 355L	610	630	254	355	28	710	770	110	170	45	740	1460	1620	456	660	585	3"	75	140	20	79.5
												1490	1680					95	170	25	100

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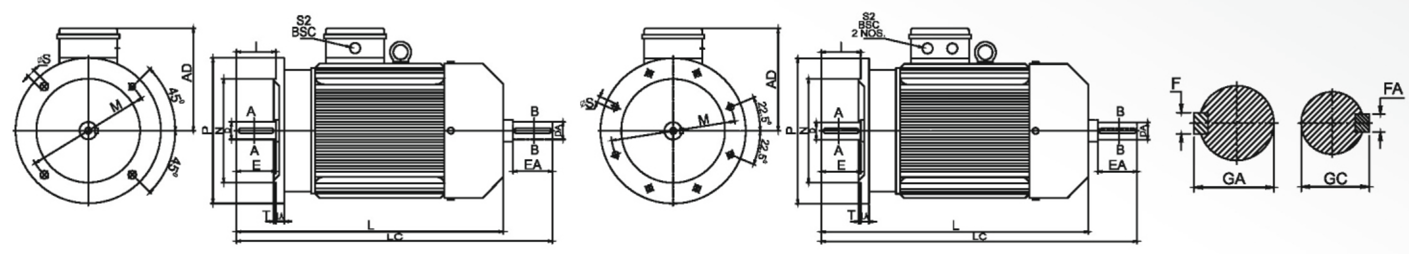
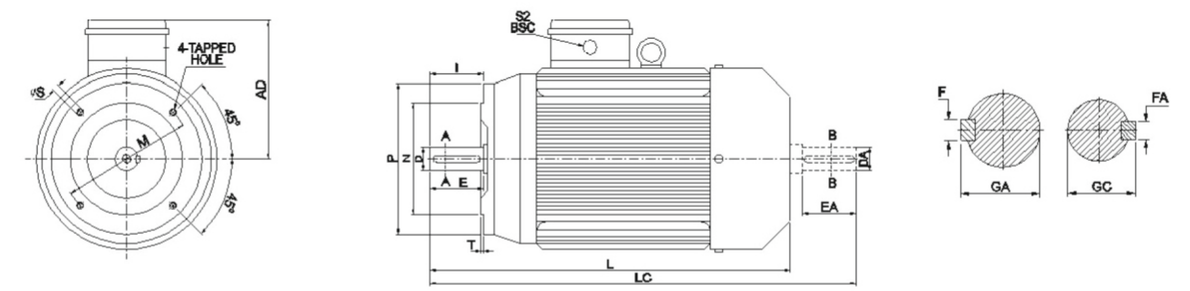
Dimensions - Flange Mounted Motors (B5 Construction) All Dimensions in mm



FRAME	P	N	M	I	S	T	LA	AD	L	LC	S2 B.S.C.	D/DA	E/EA	F/FA	GA/GC
EN 63	140	95	115	23	10	3	9	115	210	248	3/4"	11	23	4	12.5
EN 71	160	110	130	30	10	3.5	9	120	238	283	3/4"	14	30	5	16.0
EN 80	200	130	165	40	12	3.5	10	120	280	338	3/4"	19	40	6	21.5
EN 90S	200	130	165	50	12	3.5	10	125	300	368	3/4"	24	50	8	27
EN 90L	200	130	165	50	12	3.5	10	125	325	393	3/4"	24	50	8	27
EN 100L	250	180	215	60	15	4	11	145	375	453	1"	28	60	8	31
EN 112M	250	180	215	60	15	4	11	155	400	478	1"	28	60	8	31
EN 132S	300	230	265	80	15	4	12	175	465	565	1"	38	80	10	41
EN 132M	300	230	265	80	15	4	12	175	505	605	1"	38	80	10	41
EN 160M	350	250	300	110	19	5	13	235	590	720	1"	42	110	12	45
EN 160L	350	250	300	110	19	5	13	235	655	785	1"	42	110	12	45
EN 180M	350	250	300	110	19	5	13	255	640	770	$1\frac{1}{2}$"	48	110	14	51.5
EN 180L	350	250	300	110	19	5	13	255	675	805	2"	48	110	14	51.5
EN 200L	400	300	350	110	19	5	15	285	765	895	2"	55	110	16	59
EN 225M	450	350	400	110	19	5	16	335	835	965	2"	55	110	16	59
				140					865	1025		60	140	18	64
EN 250M	550	450	500	140	19	5	18	355	980	1140	2"	60	140	18	64
				140								65	140	18	69
EN 280M	550	450	500	140	19	5	18	380	1060	1220	2"	65	140	18	69
				140								75	140	20	79.5
EN 315M	660	550	600	140	24	6	22	425	1150	1310	2"	65	140	18	69
				170					1180	1370		80	170	22	85
EN 355L	800	680	740	140	24	6	25	585	1460	1620	3"	75	140	20	79.5
				170					1490	1680		95	170	25	100

Dimensions - Face Mounted Motors (B14 Construction) All Dimensions in mm



FRAME	P	N	M	I	S	T	AD	L	LC	S2 B.S.C.	D/DA	E/EA	F/FA	GA/GC
EN 63	90	60	75	23	M5 X 10	2.5	115	210	248	3/4"	11	23	4	12.5
EN 71	105	70	85	30	M6 X 10	2.5	120	238	283	3/4"	14	30	5	16.0
EN 80	120	80	100	40	M6 X 13	3.0	120	280	338	3/4"	19	40	6	21.5
EN 90S	140	95	115	50	M8 X 12	3.0	125	300	368	3/4"	24	50	8	27
EN 90L	140	95	115	50	M8 X 12	3.0	125	325	393	3/4"	24	50	8	27
EN 100L	160	110	130	60	M8 X 12	3.5	145	375	453	1"	28	60	8	31
EN 112M	160	110	130	60	M8 X 12	3.5	155	400	478	1"	28	60	8	31
EN 132S	250	180	215	80	M12 X 15	4	175	465	565	1"	38	80	10	41
EN 132M	250	180	215	80	M12 X 15	4	175	505	605	1"	38	80	10	41

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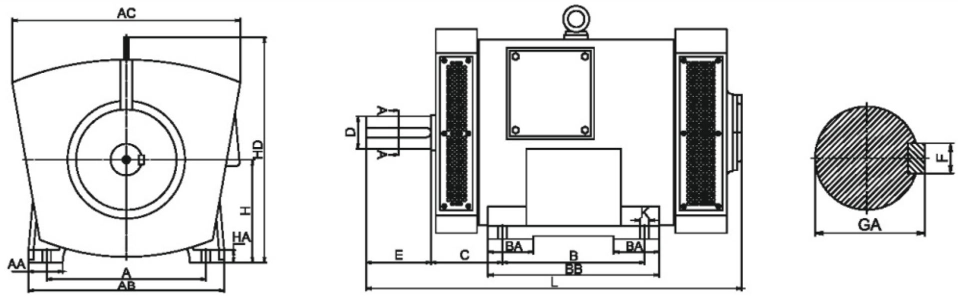
Shipping Specifications for Three Phase Induction Motor

Frame Size	56	63	71	80	90S	90L	100L	112m	132s	132m	160m	160L	180m	180L	200L
Length mm	250	275	325	350	360	375	425	450	510	560	620	660	700	740	800
Breadth mm	175	185	225	255	280	280	320	360	415	415	490	490	550	550	560
Height mm	200	210	200	225	240	240	310	350	400	400	425	425	500	500	500
Weight kg.	6	8	12	17	22	26	35	48	74	90	123	145	180	200	240

Outline Dimension Drawing for
3 Phase Squirrel Cage SPDP Foot Mounted Induction Motors for C225 to C315 Frames



FRAME	A	B	C	H	K	AB	BB	AA	BA	HA	AC	HD	L	D	E	F	GA
EN 180M	279	241	121	180	15	345	290	60	77	22	400	400	635	55	110	16	59
EN 180L	279	279	121	180	15	345	328	60	77	22	400	400	685	55	110	16	59
EN 200M	318	267	133	200	19	390	327	72	85	25	470	445	750	60	140	18	64
EN 200L	318	305	133	200	19	390	365	72	85	25	470	445	785	60	140	18	64
EN 250S	406	311	168	250	24	490	375	82	90	28	600	560	890	75	140	20	79.5
EN 250M	406	349	168	250	24	490	415	82	90	28	600	560	890	75	140	20	79.5
EN 280S	457	368	190	280	24	545	433	90	102	32	600	590	950	80	170	22	85

Shipping Specifications Three Phase SPDP Squirrel Cage Induction Motors Foot Mounted

FRAME SIZE	TYPE OF PACKING	NET WT. (kgs.)	GROSS WT. (kgs.)	LENGTH (mm.)	BREADTH (mm.)	HEIGHT (mm.)	VOLUME (cu.m.)
160M	WOODEN	121	192	826	615	535	0.27
160L	WOODEN	131	202	875	705	505	0.27
180M	WOODEN	165	291	1023	826	696	0.59
180L	WOODEN	205	311	1023	826	696	0.59
200M	WOODEN	260	366	1023	826	696	0.59
200L	WOODEN	300	406	1023	826	696	0.59
225M / MX	WOODEN	340	446	1023	826	696	0.59
250S	WOODEN	435	563	1306	1030	745	1.00
250M	WOODEN	480	618	1306	1030	745	1.00
280S	WOODEN	620	834	1500	1067	850	1.36
280M	WOODEN	710	924	1500	1067	850	1.36
315S	WOODEN	865	1118	1730	1170	930	1.88
315M	WOODEN	950	1203	1730	1170	930	1.88
315MX	WOODEN	1150	1403	1730	1170	930	1.88

Type of Construction

B3 B3/B5 B5 B6 B7 B14 V1 V3 V5 V6

Application

Induction Motors have vide and vast application, as below:

- Pumps
- Compressors
- Machine Tools
- Textile Industry
- Fans
- Crushers
- Material Handling Industry
- Oil Mills
- Ginning Mills
- Mixtures
- Conveyors
- Plastic Machines
- Chemical Plants
- Cement Industry
- Automobile Industry, etc.

Energy Efficient Motors need to be Purchased for

- New Installations
- Compressors, HVAC Systems and Pumps
- Replacing of Existing Inefficient Motors
- To Replace Oversized and Under Loaded Motors
- Preventive Maintenance or Energy Conservation Program

While Placing Orders for Motors, We need Following Information

- Application
- Ambient Temperature
- Mounting Type
- Load GD^2
- Method Starting
- Input Supply Condition and % Variance

TECHNO

TECHNO INDUSTRIES PVT. LTD.

MOTORS DIVISION

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