

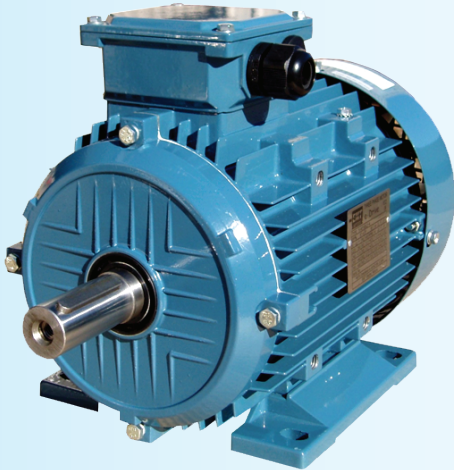
**High
Efficiency**

ELECTRIC MOTORS

Low Voltage Motor Technical Brochure

PRODUCT OVERVIEW - THREE PHASE MOTORS

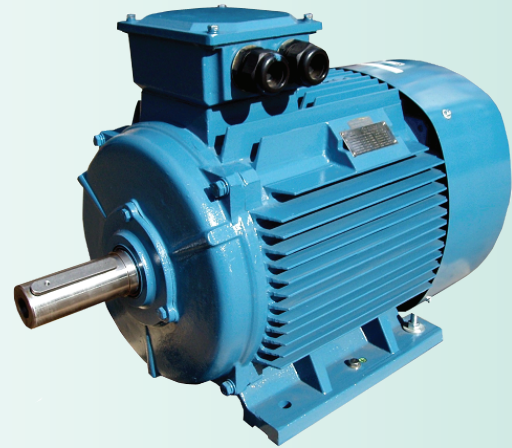
Type AHE - Aluminium IE2 / MEPS2 Motors



- **Ratings from 90 Watt up to 18.5 KW**
- **Metric frames from IEC 56 ~ 160**
- Foot, Flange and Face mountings
- Removable feet
- TEFC, IP55 enclosures
- Class F insulated windings - Class B rise
- Quality Sealed for Life Bearings
- Multi-Voltage & Multi-frequency ratings
- Top mounted terminal box as standard terminal box can be mounted on Right hand side or left hand side on motor frames 80 to 160

Type HE - Cast Iron IE2 / /MEPS2 Motors

- **Ratings from 550 Watt up to 630KW**
- **Metric frames from IEC 80 ~ 400**
- Foot, Flange and Face mountings
- TEFC, IP56 enclosures
- Class F insulated windings – class B rise
- Quality Bearings. (SKF, NSK, NTN)
- Multi-Voltage & Multi-frequency ratings
- Top mounted terminal box standard on all motors
- TC Thermistors standard on 11kw & above
- Re-greasable bearings on frames 200 and larger
- Our own workshop carries out all modifications to the above standard specification to create application specific motors. E.G. IP upgrades, insulated, roller angular contact bearing upgrades, forced cooling systems, special paint specifications, non standard mounting requirements and many more special application services.



Type ML & MY - Aluminium Single Phase Motors



- **Ratings from 120 Watt up to 2,2KW**
- **Metric frames from IEC 56 to 100**
- Foot, Flange and Face mountings
- TEFC, IP55 enclosures
- Class F insulated windings – class B rise
- Quality Sealed for Life Bearing
- Top mounted terminal box as standard
- Terminal box can be mounted on R/H or L/H side
- Manual Overload reset protection
- Fully enclosed capacitors

SPECIFICATION

Standards

EMT OMEC Motors are designed, manufactured and tested to the following Standards

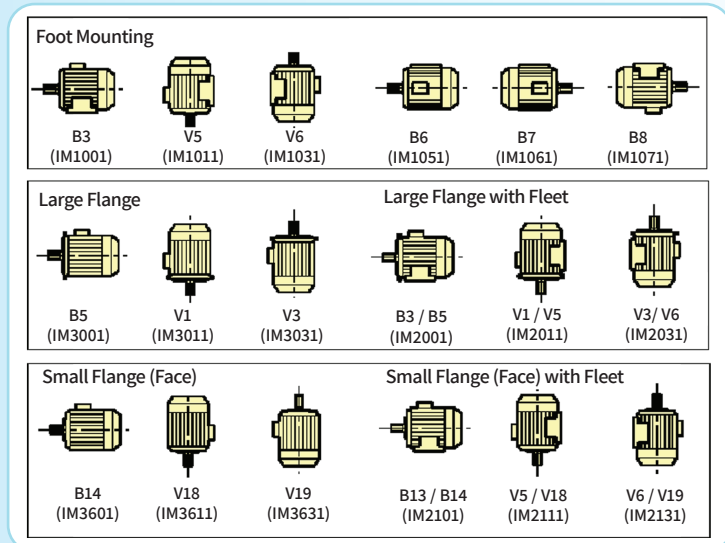
IEC 60034-1	Ratings & Performance
IEC 61972 / 60034-2	Losses & Efficiency
IEC 60034-5	Degrees of Protection
IEC 60034-6	Methods of Cooling
IEC 60037-7	construction mounting
IEC 60034-8	Terminal & Markings
IEC 60034-9	Noise Limits
IEC 60034-14	Vibration Mechanical
IEC 60072-1	Dimensions & Outputs
AS/NZS 1359.5.2004	MEPS2 Energy Efficiency Standards

Nameplates

All EMT OMEC motors are fitted with Stainless Steel nameplates. Rating and performance data is embossed and stamped to ensure it can remain permanently identifiable

Mounting Arrangement

The design of all EMT OMEC motors is such that they can be operated in all horizontal-mounting positions, providing consideration is given to the location of drain holes and bearing life EMT OMEC Motors are available in B3 foot mounted, B5 flange mounted, B14A face and some B14B mounting configurations. For confirmation of vertical operation requirements please refer to our offices for assistance with bearing design requirements.



Duty

All EMT OMEC motors are Continuous Duty Rated (S1), based upon max ambient of 40oC and altitudes below 1000 metres. For applications where motors are required to meet duty ratings from S2 to S9 please contact our offices for assistance

Type Designation

EMT OMEC Motors are designated by standard codes:

Example AHE 132S12 B3

A	Aluminium Frame If absent frame is Cast Iron
HE	Energy Efficient (MEPS2 / IE2)
132S	IEC Frame size (shaft height mm)
1	Stator core length. 1 = Short, 2 = Long, 3 = Extra long
2	Number of poles 2 = 3000rpm 4 = 1500rpm 6 = 1000rpm 8 = 750rpm
B3	Mounting arrangement B3 Foot B5 Flange B35 Foot & Flange B14A / B14B Face mount flange

Cooling

Motors in standard form are Totally Enclosed Fan Cooled (TEFC IC411). Cooling fans are one-piece fibre-reinforced, multi-blade polypropylene or high pressure die cast alloy. All fans are bi-directional and fan covers are rigid pressed steel. Other cooling formats available are

- IE416 Forced Ventilation for VSD use
- IE418 Pad mount for external ventilation

Forced Ventilation IE416

All three phase EMT OMEC Motors are suitable for Inverter Duty applications. For constant torque applications where a motor operates continuously below 50% of its rated speed, a Constant Velocity Cooling Unit is recommended, to providing continuous cooling air over the motor regardless of the output shaft speed.

EMT OMEC also recommends the fitting of insulated bearings on motors above 90kW to eliminate circulating currents and prolong bearing life.

It should be noted that with VSD applications where speed frequently exceeds 60Hz a torque drop off may be experienced necessitating the use of a higher kW motor, contact our offices for recommendations in this regard.

Rotors

All rotor windings and end rings are one-piece die cast aluminium with cooling fins to provide internal air movement. Shafts are made from high quality carbon steel. See data tables for dimensions.



Balancing

Rotors are dynamically balanced to severity grade normal (N) as specified in relevant IEC and Australian standards. EMT OMEC motors can be supplied with either a reduced (R) or special (S) vibration level upon request.

Vibration Grade	Rated Speed (rpm)	Maximum rms value of vibration velocity per Frames (mm/s)		
		56 to 132	160 to 225	250 to 450
Normal	600 - 3600	1.8	2.8	3.5
Reduced	600 - 1800	0.71	1.12	1.8
	1800-3600	1.12	1.8	2.8
Special	600 - 1800	0.45	0.71	1.12
	1800-3600	0.71	1.12	1.8

Direction of Rotation

All motors are standard bi-directional rotation.

Fasteners

All fasteners are metric zinc plated.

Bearings

Motors from frame sizes 56 up to 180 are fitted with “sealed for life” type bearings.

Motors frame size 200 to 400 frame have re-greasable bearings with a grease relief facility. Motors are supplied with high quality deep groove ball bearings, lubricated with lithium-based grease suitable for operation within an ambient range of -20 deg C to +55 deg C.

Special bearing arrangements can be provided to suit various applications. See data tables for standard bearing sizes.

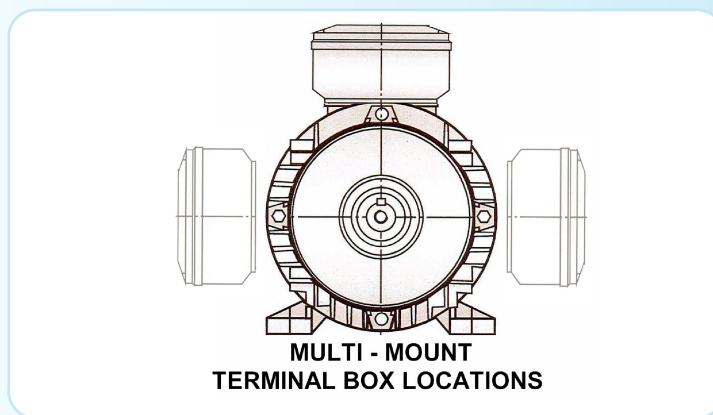
Paint System

An enamel based epoxy polymer paint finish is used as standard. Special paint systems such as 2-pack epoxy for food industry or for corrosive environments can be provided upon request

Terminal Boxes

All terminal boxes can be rotated in 90 degree steps through 360 degrees. Metric conduit entries are provided on all motors. Refer to dimension data for number and size of entries. The terminal box material on frames type AHE 63 to AHE 160 is Alloy and frames HE 132 to HE 450 have Cast Iron boxes. All Single phase motors have reinforced PVC boxes which enclose the capacitors

Aluminium motors are multi-mount and can have left, top or right cable box positions. Cast Iron motors have top boxes only.

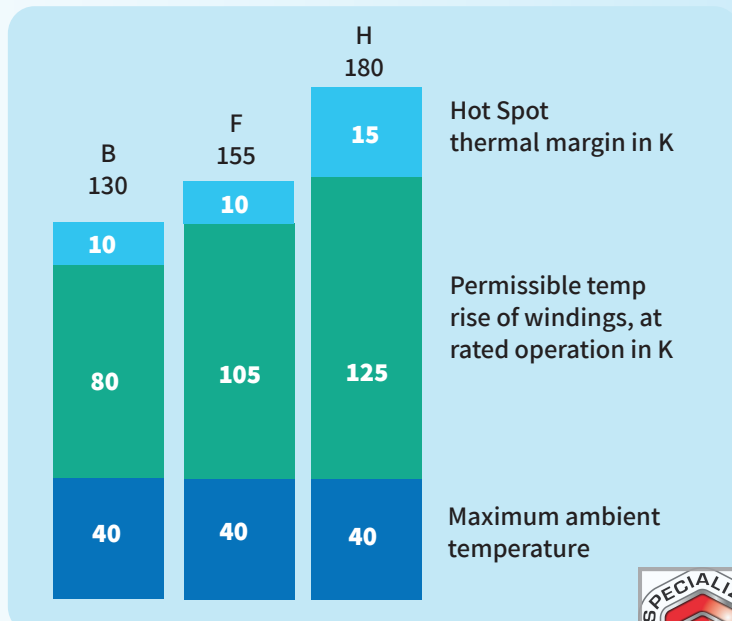


Insulation

EMT OMEC Motors are all wound with Class F Insulation. Class H motors are available on request. All designs limit rise to 80 Deg C at FL

Insulation materials are divided 3 general classes each having a recommended temperature range under normal operating conditions. Exceeding these limits will reduce motor life proportionally.

Temperature Limits for various winding insulating classes.



Anti-Condensation Heaters

All EMT OMEC motors can be fitted with anti condensation heaters, installed around the drive end windings these usually energised when the supply to the motor is switched off Heater power ratings normally used are shown in the table below. The standard supply voltage is 220 - 240V AC but other supply voltages can be provided upon request.

Motor Frame Size	Power (Watts)
56 - 71	8
80 - 112	25
132 - 200	40
225 - 280	54
315 - 400	99

Thermistor Protection

EMT motors rated at 11KW and above are fitted with one set of 3 x PTC Thermistors embedded into the windings during manufacture. Thermistors can also be fitted to motors in frame sizes 63 to 132 as an option.

Optional Over-Temperature Protection

Additional protection devices on request:

Alarm Thermistors:

A second set of PTC Thermistors with a lower temperature rating, can be installed to provide an over temperature alarm warning prior to any trip activation of the main thermistors

PT100 Thermocouples:

These platinum resistance thermometers provide variable linear resistance in proportion to winding temperature. They are particularly suitable for continuous temperature monitoring application requirements in windings and bearings.

Terminal Connections (Three phase)

All 3 phase motors have six terminals. EMT OMEC motors are compatible for use with single-phase variable frequency controllers up to 3kW and 3 phase variable frequency controllers throughout the entire range.

DOL terminations 3KW and below are:

Delta 220/240V 50Hz or 260/280V 60Hz

Star 380/415V 50Hz or 440/480V 60Hz

DOL terminations 4KW and above are:

Delta 380/415V 50Hz or 440/480V 60Hz

Star 660/720V 50Hz or 760/830V 60Hz

Terminal Connections (Single phase)

See connection diagram for single phase motors in this section.

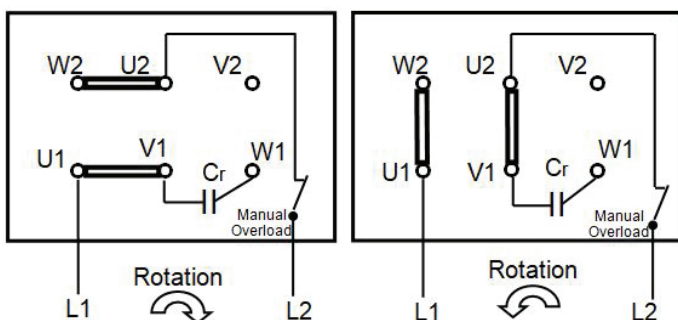
Both MY and ML Series Single-Phase motors are suitable for applications where reversing of direction is required, either by simple changing of connection bridges or by use of an external reversing switch.

Motors from frame size 56 to 90 are suitable for 240V 50Hz connection. Motors of frame size 100 and above are Dual Voltage rated and suitable for connection to 240V or 480V, 50Hz single phase supply.

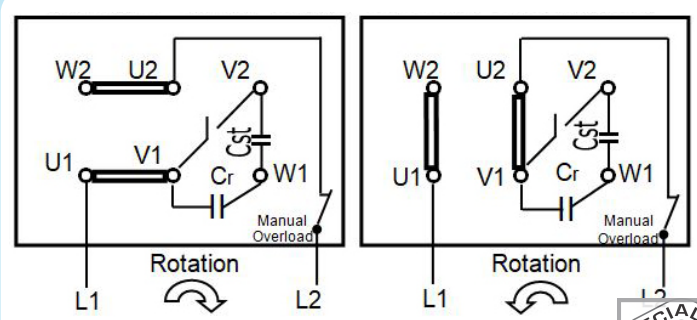
Single Phase Centrifugal Start Switch

Cap Start/Cap Run motors utilise a solid, internal centrifugal switch plate mechanism that has a larger diameter than the motor bearings, therefore eliminating potential damage to the switch plate when the motor is dismantled for maintenance. The switch plates on larger ML series motors have dual start switch contacts, making them suitable for applications that have a long run up time.

MY Series - Capacitor Run Motor



ML Series - Single Voltage, Cap start / Cap run Motor



Type AHE Aluminium High Efficiency Motors

MEPS2006 Compliance with AS/NZS1359.5.2004

IE2 Efficiency values according to IEC 60034-30

- Ratings from 90Watt to 18.5kW
- Multi-Voltage / Multi-Frequency ratings
- Top mounted terminal box on all frames
- Terminal box can be relocated to Left hand side or Right hand side on frames AHE 80 ~ AHE 160

- Metric frames to IEC and Australian Standards
- Low weight Aluminium construction.
- TEFC, IP55 enclosure
- Class "F" insulation
- Foot, Flange and Face mountings

Performance Data for 400V / 50Hz

EMT Motor Type	Rated Output		Full Load				Locked Current ----- Rated Current	Locked Torque ----- Rated Torque	Max. Torque ----- Rated Torque	Net Kg
	KW	Speed Rpm	Current Amp	Eff. %	Power Factor Cos Ø	Torque Nm				

3000 r/min = 2 Pole

AHE 5622	0.12	2700	0.54	55.0	0.53	0.44	4.0	2.0	2.5	3.4
AHE 6312	0.18	2700	0.60	64.6	0.73	0.64	4.3	2.4	2.5	3.9
AHE 6322	0.25	2720	0.62	71.2	0.81	0.87	4.3	2.7	2.8	4.0
AHE 7112	0.37	2780	0.95	68.0	0.82	1.27	5.1	2.8	2.8	6.2
AHE 7122	0.55	2780	1.3	75.9	0.85	1.89	5.1	2.8	2.8	6.3
AHE 8012	0.75	2840	1.85	79.0	0.75	2.47	7.0	2.9	3.1	10
AHE 8022	1.1	2840	2.3	81.8	0.74	3.70	7.4	3.3	3.2	12
AHE 90S2	1.5	2860	3.3	83.1	0.79	5.0	7.9	4.1	2.8	15
AHE 90L2	2.2	2850	4.3	84.9	0.80	7.4	7.4	3.5	2.9	17
AHE 100L2	3	2900	5.5	85.5	0.89	9.9	8.4	3.7	3.3	25
AHE 112M2	4	2900	7.2	88.6	0.89	13.2	8.3	3.8	3.7	31
AHE 132S12	5.5	2920	9.6	87.6	0.91	18	8.3	3.1	3.0	45
AHE 132S22	7.5	2920	13.1	89.8	0.91	25	8.5	3.1	3.4	48
AHE 160M12	11	2920	20.0	91.0	0.90	36	5.7	2.3	3.4	78
AHE 160M22	15	2950	25.1	91.3	0.91	48	7.1	2.3	3.2	81
AHE 160L2	18.5	2950	32	92.5	0.90	60	6.8	2.2	3.1	87

1500 r/min = 4 Pole

AHE 5624	0.09	1300	0.44	54.0	0.52	0.70	4.0	2.0	2.4	3.6
AHE 6314	0.12	1250	0.54	52.3	0.65	0.92	4.5	2.6	3.0	3.5
AHE 6324	0.18	1320	0.55	61.0	0.72	1.30	3.1	2.3	2.5	4.4
AHE 7114	0.25	1400	0.74	66.1	0.74	1.71	4.5	2.8	3.0	6.1
AHE 7124	0.37	1380	1.05	71.1	0.73	2.56	4.2	2.2	2.2	6.0
AHE 8014	0.55	1390	1.5	74.0	0.70	3.78	4.6	2.4	2.5	8.8
AHE 8024	0.75	1430	1.96	81.2	0.68	5.01	6.2	3.7	2.9	12
AHE 90S4	1.1	1430	2.5	82.6	0.73	7.35	6.6	3.9	3.9	14
AHE 90L4	1.5	1430	3.3	84.1	0.77	10.0	7.1	4.5	3.5	17
AHE 100L14	2.2	1430	4.5	85.6	0.82	14.7	6.9	3.2	2.8	24
AHE 100L24	3	1430	6.1	88.8	0.77	20	6.5	3.2	2.4	27
AHE 112M4	4	1450	8.5	88.9	0.76	26	7.5	3.5	2.9	32
AHE 132S4	5.5	1450	10.8	89.2	0.81	36	7.9	2.8	2.7	48
AHE 132M4	7.5	1450	14.3	91.0	0.81	49	8.7	3.2	2.6	58
AHE 160M4	11	1460	20.5	90.0	0.87	72	6.6	2.2	2.7	84
AHE 160L4	15	1460	27.2	93.0	0.82	97	7.7	2.5	3.0	97

* These ratings have Class F temperature rise

All design data subject to change without notice



Type AHE Aluminium High Efficiency Motors

MEPS2006 Compliance with AS/NZS1359.5.2004

IE2 Efficiency values according to IEC 60034-30

- Ratings from 90Watt to 18.5kW
- Multi-Voltage / Multi-Frequency ratings
- Top mounted terminal box on all frames
- Terminal box can be relocated to Left hand side or Right hand side on frames AHE 80 ~ AHE 160

- Metric frames to IEC and Australian Standards
- Low weight Aluminium construction.
- TEFC, IP55 enclosure
- Class "F" insulation
- Foot, Flange and Face mountings

Performance Data for 400V / 50Hz

EMT Motor Type	Rated Output		Full Load				Locked Current ----- Rated Current	Locked Torque ----- Rated Torque	Max. Torque ----- Rated Torque	Net Kg
	KW	Speed Rpm	Current Amp	Eff. %	Power Factor Cos Ø	Torque Nm				

1000 r/min = 6 Pole

AHE 6316	0.09	850	0.44	57.0	0.50	1.01	5.0	2.3	2.3	3.8
AHE 6326	0.12	850	0.47	60.0	0.61	1.35	5.1	2.2	2.0	4.5
AHE 7116	0.18	915	0.66	61.6	0.64	1.88	3.5	2.3	3.1	6.4
AHE 7126	0.25	915	0.91	60.4	0.65	2.61	3.6	2.6	4.3	6.5
AHE 8016	0.37	880	1.20	62.7	0.72	4.02	3.3	2.0	2.1	8.5
AHE 8026	0.55	880	1.73	67.2	0.72	5.97	3.2	2.4	2.2	10.4
AHE 90S6	0.75	940	2.03	78.2	0.65	7.6	4.5	2.3	2.7	17
AHE 90L6	1.1	930	2.82	79.9	0.68	11.30	4.6	2.5	2.9	18
AHE 100L6	1.5	940	3.66	79.9	0.75	15.2	4.7	2.3	2.2	25
AHE 112M6	2.2	950	5.1	82.2	0.68	22	5.6	2.6	2.4	32
AHE 132S6	3	950	6.8	85.9	0.71	30	7.7	3.6	3.4	50
AHE 132M16	4	960	8.7	85.1	0.77	40	7.3	3.2	2.8	51
AHE 132M26	5.5	960	11.5	86.5	0.78	54	7.6	3.3	2.6	63
AHE 160M6	7.5	970	22.7	89.8	0.78	109	6.43	2.45	2.87	87
AHE 160L6	11	975	28.8	91.1	0.83	147	6.4	2.47	3.04	97

750 r/min = 8 Pole

AHE 90L8	0.55	670	2.02	67.2	0.72	7.76	2.8	1.9	2.4	17
AHE 100L18	0.75	710	2.30	77.2	0.60	9.9	4.2	2.4	2.1	26
AHE 100L28	1.1	700	3.14	79.7	0.64	14.8	3.8	2.1	2.5	29
AHE 112M8	1.5	710	4.24	81.7	0.67	20	3.8	2.0	2.7	30
AHE 132S8	2.2	710	5.5	80.8	0.69	29	4.6	2.0	2.5	50
AHE 132M8	3	710	7.6	81.3	0.70	40	5.0	2.2	2.8	63
AHE 160M18	4	720	9.1	84.2	0.75	53.0	5.0	1.97	2.76	72
AHE 160M28	5.5	720	12.5	86.2	0.74	73.0	6.2	2.38	3.27	82
AHE 160L8	7.5	720	15.9	89.2	0.77	99.5	6.0	2.13	3.02	94

* These ratings have Class F temperature rise

All design data subject to change without notice

1HP = 0.746kW



Type HE Cast Iron High Efficiency Motors

MEPS2006 Compliance with AS/NZS1359.5.2004

IE2 Efficiency values according to IEC 60034-30

- Ratings from 550Watt to 630kW
- Metric frames to IEC and Australian Standards
- Multi-Voltage / Multi-Frequency ratings
- Top mounted terminal box on all frames
- Thermistors standard on 11kw & above
- Cast Iron construction.
- TEFC, IP56 enclosure
- Class "F" insulation
- Foot, Flange and Face mountings
- Regreasable bearings on frames 200 and larger

Performance Data for 400V / 50Hz

EMT Motor Type	Rated Output		Full Load				Locked Current ----- Rated Current	Locked Torque ----- Rated Torque	Max. Torque ----- Rated Torque	Moment of Inertia J kgm2	Net Kg
	KW	Speed Rpm	Current Amp	Eff. %	Power Factor Cos Ø	Torque Nm					
3000 r/min = 2 Pole											
HE 8012	0.75	2860	01.7	80.5	0.81	2.5	7.0	3.08	3.38	0.0009	17
HE 8022	1.1	2865	2.3	84.1	0.83	3.7	7.5	3.22	3.55	0.0010	18
HE 90S2	1.5	2875	3.0	85.3	0.83	5.0	7.9	3.09	3.40	0.0012	23
HE 90L2	2.2	2865	4.3	85.7	0.87	7.3	8.2	3.76	3.62	0.0014	26
HE 100L2	3	2860	5.6	86.7	0.89	10.0	7.1	2.77	3.12	0.0030	34
HE 112M2	4	2880	7.1	88.0	0.92	13.3	6.9	2.04	3.14	0.0056	41
HE 132S12	5.5	2925	9.9	89.7	0.89	18.0	8.0	2.14	3.58	0.0104	60
HE 132S22	7.5	2925	13.7	90.0	0.88	24.5	8.6	2.07	3.91	0.0125	63
HE 160M12	11	2940	20.1	90.6	0.89	35.7	5.7	2.30	3.48	0.0372	109
HE 160M22	15	2940	27.3	91.3	0.89	48.7	7.1	2.29	3.24	0.0435	119
HE 160L2	18.5	2940	33.1	91.8	0.91	60.1	6.8	2.25	3.09	0.0527	136
HE 180M2	22	2955	38.3	92.2	0.89	71.1	7.5	2.77	3.48	0.0712	172
HE 200L12	30	2950	50.7	93.1	0.92	97.1	7.5	2.26	3.31	0.1192	223
HE 200L22	37	2950	62.4	93.3	0.92	120	7.5	2.24	3.30	0.1333	242
HE 225M2	45	2965	75.9	93.8	0.91	145	7.4	3.35	3.42	0.2214	302
HE 250M2	55	2970	92.0	94.6	0.91	177	8.0	2.05	3.62	0.3055	382
HE 280S2	75	2965	127	94.6	0.90	242	6.2	2.19	2.98	0.5845	515
HE 280M2	90	2980	152	95.3	0.90	288	8.1	2.80	4.08	0.6655	545
HE 315S2	110	2975	185	95.1	0.90	353	6.3	1.97	3.15	1.1310	930
HE 315M2	132	2975	222	95.5	0.90	424	5.7	1.73	2.77	1.7470	980
HE 315L12	160	2980	266	95.8	0.91	513	6.7	2.02	3.28	2.0070	1090
HE 315L22	200	2985	333	96.1	0.90	640	5.9	1.84	3.05	2.2690	1190
HE 355M2	250	2985	419	96.1	0.90	800	6.5	1.90	3.17	3.2960	1710
HE 355L12	280	2985	465	96.3	0.90	896	7.0	1.97	3.22	3.8470	1870
HE 355L22	315	2985	505	96.5	0.93	1008	7.5	1.93	3.64	3.8470	1870
HE 355L32	355	2985	573	96.5	0.93	1136	6.4	1.83	2.87	3.9570	2030
HE 400M12	355	2985	586	96.5	0.91	1136	6.8	1.90	3.22	/	2880
HE 400M22	400	2985	658	96.7	0.91	1280	6.9	1.94	3.28	/	2980
HE 400M32	450	2985	740	96.7	0.91	1440	6.9	1.91	3.20	/	3230
HE 400L12	500	2985	816	96.8	0.91	1600	7.2	1.95	3.31	/	3280
HE 400L22	560	2985	910	96.9	0.92	1792	7.1	1.99	3.35	/	3330

1HP = 0.746kW

All design data subject to change without notice



Type HE Cast Iron High Efficiency Motors

MEPS2006 Compliance with AS/NZS1359.5.2004

IE2 Efficiency values according to IEC 60034-30

- Ratings from 550Watt to 630kW
- Metric frames to IEC and Australian Standards
- Multi-Voltage / Multi-Frequency ratings
- Top mounted terminal box on all frames
- Thermistors standard on 11kw & above
- Cast Iron construction.
- TEFC, IP56 enclosure
- Class "F" insulation
- Foot, Flange and Face mountings
- Regreasable bearings on frames 200 and larger

Performance Data for 400V / 50Hz

EMT Motor Type	Rated Output		Full Load				Locked Current ----- Rated Current	Locked Torque ----- Rated Torque	Max. Torque ----- Rated Torque	Moment of Inertia J kgm2	Net Kg
	KW	Speed Rpm	Current Amp	Eff. %	Power Factor Cos Ø	Torque Nm					

1500 r/min = 4 Pole

HE 8024	0.75	1410	1.70	82.2	0.77	5.1	5.87	2.94	3.42	0.0021	19
HE 90S4	1.1	1420	2.6	83.9	0.72	7.4	7.4	3.29	3.37	0.0022	23
HE 90L4	1.5	1390	3.1	85.5	0.79	10.3	7.0	3.61	3.59	0.0028	29
HE 100L14	2.2	1435	4.7	88.3	0.76	14.6	7.2	3.00	4.17	0.0056	35
HE 100L24	3	1435	6.2	88.7	0.79	20.0	6.2	2.32	2.88	0.0070	39
HE 112M4	4	1435	7.5	88.5	0.837	26.6	8.7	2.77	4.21	0.0091	45
HE 132S4	5.5	1445	10.8	89.2	0.82	36.3	7.5	3.23	3.55	0.0210	62
HE 132M4	7.5	1445	13.7	90.1	0.88	49.6	8.0	3.42	3.72	0.0311	74
HE 160M4	11	1465	20.7	91.0	0.84	71.7	6.6	2.14	2.65	0.0732	114
HE 160L4	15	1465	27.7	91.8	0.84	97.8	7.7	2.50	3.02	0.0942	135
HE 180M4	18.5	1470	34.0	92.2	0.87	120	6.9	2.19	3.17	0.1355	170
HE 180L4	22	1470	39.3	92.7	0.87	143	7.1	3.26	3.28	0.1365	184
HE 200L4	30	1465	52.3	93.5	0.89	196	6.4	2.54	2.83	0.2455	235
HE 225S4	37	1480	65.6	93.6	0.877	239	6.2	1.72	2.72	0.3910	290
HE 225M4	45	1480	79.5	94.1	0.87	290	6.5	2.35	3.03	0.4510	326
HE 250M4	55	1480	95.3	94.4	0.88	355	7.4	2.25	3.28	0.6410	385
HE 280S4	75	1485	127	95.0	0.98	482	6.6	2.18	3.17	1.0450	515
HE 280M4	90	1485	152	95.1	0.90	579	6.9	2.08	3.37	1.3970	605
HE 315S4	110	1485	189	95.6	0.88	707	6.1	2.21	3.16	2.9810	931
HE 315M4	132	1485	228	95.7	0.88	849	5.8	2.16	3.05	3.4810	1017
HE 315L14	160	1485	271	95.7	0.89	1029	6.0	2.01	3.00	3.9620	1085
HE 315L24	200	1485	340	95.9	0.89	1286	6.0	2.20	2.98	4.4720	1200
HE 355M24	250	1490	420	96.1	0.89	1602	5.8	1.98	2.92	7.1660	1740
HE 355L14	280	1490	468	96.5	0.90	1795	6.4	2.47	3.04	7.9100	1870
HE 355L24	315	1490	528	96.5	0.89	2019	6.7	2.14	3.23	8.7100	1975
HE 355L34	355	1490	591	96.6	0.90	2275	6.1	2.01	2.74	11.190	2025
HE 400M14	355	1490	593	96.7	0.89	2275	6.7	1.44	2.92	14.680	2980
HE 400M24	400	1490	670	96.7	0.89	2564	6.4	1.35	2.87	14.890	3030
HE 400M34	450	1490	744	96.8	0.90	2884	6.6	1.43	3.03	15.100	3080
HE 400L14	500	1490	824	96.9	0.90	3205	6.2	1.30	2.88	18.450	3290
HE 400L24	560	1490	935	96.9	0.89	3589	7.1	1.70	3.50	19.550	3390
HE 400L34	630	1490	1048	97.1	0.89	4038	6.6	1.53	2.95	21.150	3460

1HP = 0.746kW

All design data subject to change without notice



Type HE Cast Iron High Efficiency Motors

MEPS2006 Compliance with AS/NZS1359.5.2004
IE2 Efficiency values according to IEC 60034-30

- Ratings from 550Watt to 630kW
- Metric frames to IEC and Australian Standards
- Multi-Voltage / Multi-Frequency ratings
- Top mounted terminal box on all frames
- Thermistors standard on 11kw & above
- Cast Iron construction.
- TEFC, IP56 enclosure
- Class "F" insulation
- Foot, Flange and Face mountings
- Regreasable bearings on frames 200 and larger

Performance Data for 400V / 50Hz

EMT Motor Type	Rated Output		Full Load				Locked Current	Locked Torque	Max. Torque	Moment of Inertia J kgm2	Net Kg
	KW	Speed Rpm	Current Amp	Eff. %	Power Factor Cos Ø	Torque Nm	----- Rated Current	----- Rated Torque	----- Rated Torque		

1000 r/min = 6 Pole

HE 90S6	0.75	940	12.1	81.2	0.63	7.8	5.3	2.78	3.47	0.0030	24
HE 90L6	1.1	930	2.90	80.0	0.68	11.4	5.62	2.78	2.32	0.0036	26
HE 100L6	1.5	930	3.34	82.1	0.79	15.4	6.1	2.38	3.34	0.0070	34
HE 112M6	2.2	950	5.0	83.4	0.76	22.2	5.0	2.67	3.31	0.0130	40
HE 132S6	3	960	6.7	84.9	0.81	29.7	6.0	2.00	2.91	0.0275	57
HE 132M16	4	965	8.4	86.3	0.79	39.6	5.7	1.92	2.78	0.0345	73
HE 132M26	5.5	965	11.3	87.7	0.80	54.4	5.8	1.98	2.89	0.0434	77
HE 160M6	7.5	970	16.0	89.0	0.76	74.2	6.33	2.37	3.11	0.0802	110
HE 160L6	11	970	22.7	89.8	0.78	109	6.43	2.45	2.87	0.1085	133
HE 180L6	15	975	28.8	91.1	0.83	147	6.4	2.47	3.04	0.1672	174
HE 200L16	18.5	975	34.3	91.7	0.85	181	6.5	2.14	3.08	0.3020	219
HE 200L26	22	980	41.9	91.8	0.83	215	6.8	2.82	3.36	0.3420	228
HE 225M6	30	980	55.7	92.7	0.84	292	6.0	2.09	2.91	0.5250	296
HE 250M6	37	980	66	93.3	0.87	361	5.6	1.90	2.92	0.8080	412
HE 280S6	45	985	80	93.7	0.87	436	6.5	1.98	2.99	1.3340	470
HE 280M6	55	985	96.5	93.9	0.88	533	6.9	2.11	3.00	1.5980	545
HE 315S6	75	990	136	94.5	0.84	723	6.1	1.80	2.92	3.9390	866
HE 315M6	90	990	164	94.8	0.84	868	6.1	1.99	2.90	4.5790	948
HE 315L16	110	990	195	95.2	0.85	1061	5.9	1.89	2.86	5.2280	1120
HE 315L26	132	990	230	95.4	0.87	1273	6.1	1.97	2.90	5.5390	1185
HE 355M16	160	990	266	95.6	0.91	1543	7.0	1.87	3.40	9.2650	1705
HE 355M26	180	990	301	95.7	0.90	1736	6.9	1.70	3.03	9.5180	1785
HE 355M36	200	990	332	95.6	0.91	1929	6.8	1.89	3.35	10.760	1890
HE 355L26	250	990	424	96.1	0.89	2412	6.7	1.88	3.25	12.855	2000
HE 355L36	280	990	474	96.2	0.89	2701	7.1	1.87	3.30	14.885	2080
HE 400M16	315	990	537	96.2	0.88	3039	6.5	1.37	2.87	18.130	3530
HE 400M26	355	995	607	96.4	0.87	3407	6.7	1.27	2.98	19.050	3610
HE 400L16	400	995	684	96.6	0.87	3839	7.1	1.46	3.18	21.700	3830
HE 400L26	450	995	758	96.6	0.89	4319	6.5	1.22	2.92	22.020	3900
HE 400L36	500	995	857	96.7	0.87	4799	7.1	1.52	3.42	23.420	3995

1HP = 0.746kW

All design data subject to change without notice



Type HE Cast Iron High Efficiency Motors

MEPS2006 Compliance with AS/NZS1359.5.2004
IE2 Efficiency values according to IEC 60034-30

- Ratings from 550Watt to 630kW
- Metric frames to IEC and Australian Standards
- Multi-Voltage / Multi-Frequency ratings
- Top mounted terminal box on all frames
- Thermistors standard on 11kw & above
- Cast Iron construction.
- TEFC, IP56 enclosure
- Class "F" insulation
- Foot, Flange and Face mountings
- Regreasable bearings on frames 200 and larger

Performance Data for 400V / 50Hz

EMT Motor Type	Rated Output		Full Load				Locked Current ----- Rated Current	Locked Torque ----- Rated Torque	Max. Torque ----- Rated Torque	Moment of Inertia J kgm2	Net Kg
	KW	Speed Rpm	Current Amp	Eff. %	Power Factor Cos Ø	Torque Nm					

750 r/min = 8 Pole

HE 100L18	0.75	700	2.2	77.5	0.66	10.2	4.4	2.00	33.05	0.0063	33
HE 100L28	1.1	700	3.1	77.5	0.63	15.0	4.9	3.03	4.00	0.0077	34
HE 112M8	1.5	705	4.0	79.1	0.64	20.3	4.9	3.67	3.12	0.0138	39
HE 132S8	2.2	715	5.5	80.9	0.72	29.4	5.2	2.04	2.88	0.0290	62
HE 132M8	3	715	7.0	82.7	0.75	40.1	5.0	2.21	2.86	0.0380	66
HE 160M18	4	720	9.1	84.2	0.75	53.0	5.0	1.97	2.76	0.0650	94
HE 160M28	5.5	720	12.5	86.2	0.74	73.0	6.2	2.38	3.27	0.0820	109
HE 160L8	7.5	720	15.9	89.2	0.77	99.5	6.0	2.13	3.02	0.1142	131
HE 180M8	11	725	23.3	89.3	0.76	145	6.3	2.27	2.89	0.1675	173
HE 200L8	15	730	31.7	90.2	0.76	196	6.3	2.25	2.83	0.3255	234
HE 225S8	18.5	730	38.9	90.7	0.76	242	6.6	2.20	2.85	0.4825	276
HE 225M8	22	735	43.8	91.7	0.79	286	6.7	2.11	2.87	0.5325	298
HE 250M8	30	735	58.6	92.2	0.80	390	6.0	2.05	2.81	0.8100	375
HE 280S8	37	735	70.7	93.2	0.81	481	6.6	2.08	2.67	1.3830	480
HE 280M8	45	740	87.6	93.5	0.79	581	5.8	2.10	2.71	1.7230	560
HE 315S8	55	740	105	94.0	0.80	710	5.0	1.67	2.63	4.5910	915
HE 315M8	75	740	141	94.4	0.81	968	6.0	2.04	2.65	5.3600	991
HE 315L18	90	740	169	94.7	0.81	1161	6.1	2.05	2.71	6.1110	1083
HE 315L28	110	740	204	95.1	0.82	1420	6.0	2.01	2.62	6.5500	1174
HE 355M18	132	745	239	95.4	0.84	1692	6.6	1.83	3.04	12.840	1815
HE 355M28	160	745	285	95.7	0.85	2051	5.7	1.67	2.75	14.320	1905
HE 355L18	180	745	322	95.8	0.84	2307	6.1	1.75	2.95	14.950	1985
HE 355L28	200	745	359	95.7	0.84	2564	5.8	1.73	2.91	15.800	2060
HE 400M18	250	745	462	96.1	0.81	3205	6.7	1.42	3.32	25.400	3145
HE 400M28	280	745	508	96.3	0.83	3589	6.5	1.35	3.25	26.300	3165
HE 400L18	315	745	561	96.3	0.84	4038	6.6	1.30	3.14	27.500	3175
HE 400L28	355	745	632	96.4	0.84	4551	5.9	1.16	2.88	29.120	3205
HE 400L38	400	745	708	96.5	0.85	5128	5.8	1.14	2.92	31.020	3235

1HP = 0.746kW

All design data subject to change without notice



Type AHE Aluminium High Efficiency Motors

Main Dimensions

Frame	A	B	C	D	E	F	G	GD	DH	H	K	AA	AB	AC	BB	HA	HD	LD	L
56	90	71	36	9	20	3	7.2	3	M4	56	6	25	110	108	90	8	154	61	192
63	100	80	40	11	23	4	8.5	4	M4	63	7	34	120	108	105	8	161	68	210
71	112	90	45	14	30	5	11	5	M5	71	7	36	136	138	106	9	186	70	245
80	125	100	50	19	40	6	15.5	6	M6	80	10	41	150	157	130	10	222	75	295
90S	140	100	56	24	50	8	20	7	M8	90	10	47	168	174	165	10	240	84	330
90L	140	125	56	24	50	8	20	7	M8	90	10	47	168	174	165	11	225	84	340
100L	160	140	63	28	60	8	24	7	M10	100	12	50	190	195	176	12	261	90	375
112M	190	140	70	28	60	8	24	7	M10	112	12	60	220	220	180	14	296	93	395
132S	216	140	89	38	80	10	33	8	M12	132	12	62	252	256	224	15	340	104	465
132M	216	178	89	38	80	10	33	8	M12	132	12	62	252	256	224	15	316	104	505
160M	254	210	108	42	110	12	37	8	M16	160	15	55	305	315	260	18	405	155	610
160L	254	254	108	42	110	12	37	8	M16	160	15	55	305	315	305	18	405	155	650

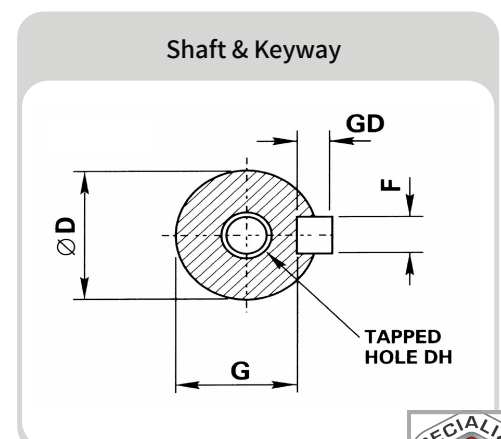
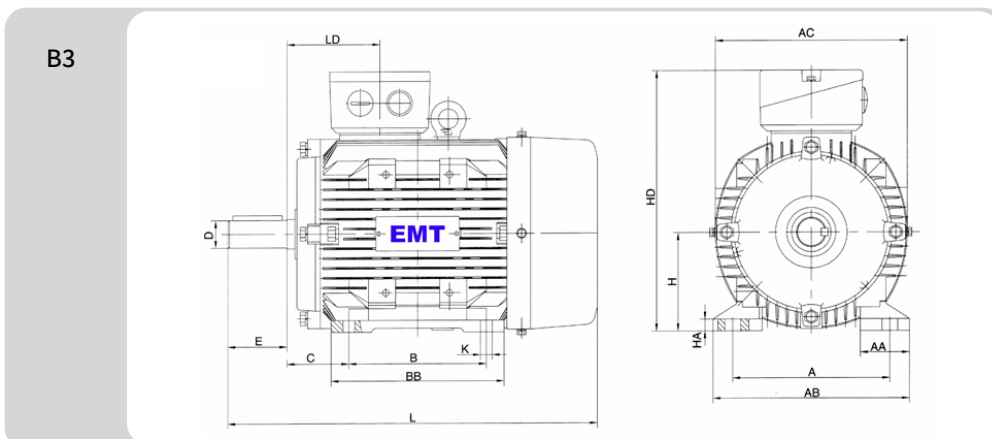
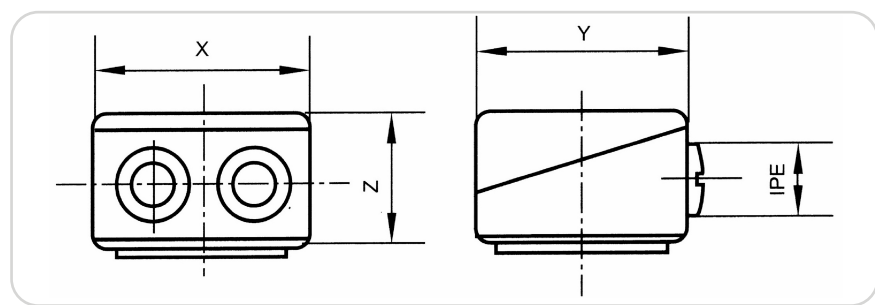
All dimensions are in mm and subject to change without notice.

Frame	B5 Flange					
	M	N	P	LA	S	T
56	100	80	120	9	7	3
63	115	95	140	9	10	3
71	130	110	160	10	10	3.5
80	165	130	200	12	12	3.5
90S/L	165	130	200	12	12	3.5
100L	215	180	250	14	15	4
112M	215	180	250	14	15	4
132S/M	265	230	300	16	15	4
160M/L	300	250	350	17	19	5

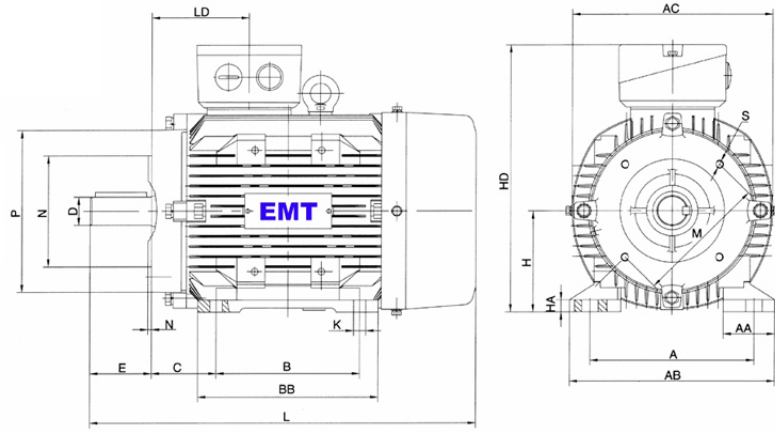
B14A Flange				
M	N	P	S	T
65	50	80	M5	2.5
75	60	90	M5	2.5
85	70	105	M6	2.5
100	80	120	M6	3
115	95	140	M8	3
130	110	160	M8	3.5
130	110	160	M8	3.5
165	130	200	M10	3.5

B14B Flange				
M	N	P	S	T
85	70	150	M6	2.5
100	80	120	M6	3
115	95	140	M8	3
130	110	160	M8	3.5
130	110	160	M8	3.5
165	130	200	M10	3.5
165	130	200	M10	3.5
215	180	250	M12	4

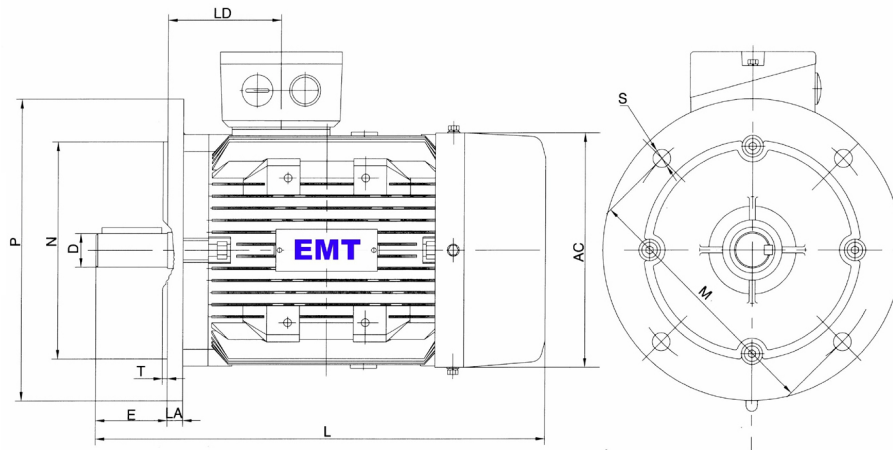
Frames	Terminal Box			
	X	Y	Z	Cable Entry
56	87	87	46	1 x M20 x 1.5
63, 71, 80	93	93	44	1 x M20 x 1.5
90, 100	101	101	49	1 x M25 x 1.5
112, 132	113	113	57	2 x M25 x 1.5
160	150	160	78	2 x M32 x 1.5



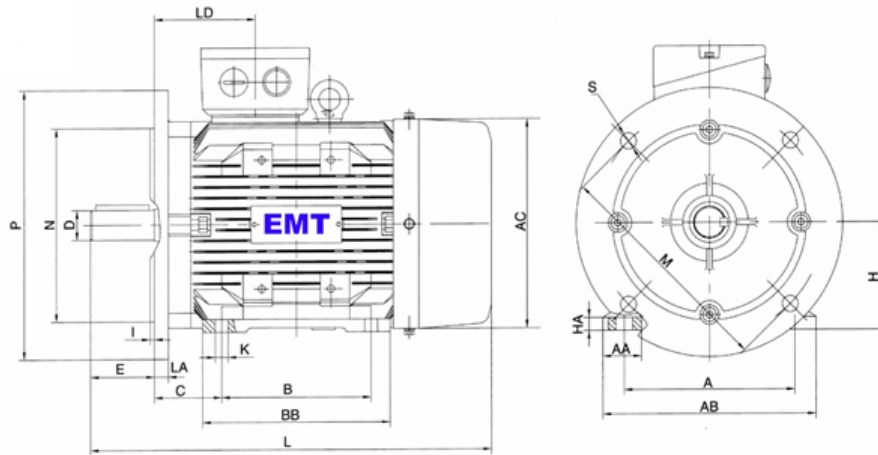
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B3 / B14B



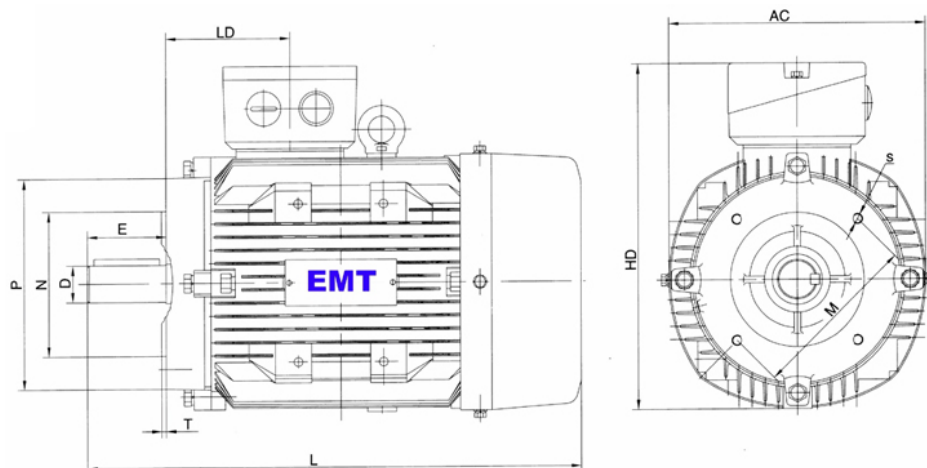
B5



B3 / B5



B14A
B14B



Type HE Cast Iron High Efficiency Motors

Main Dimensions

Frame	Pole	A	B	B1	C	D	E	F	G	GD	H	K	AB	BB	AC	AD	HA	HB	HD	AA	L	LD	LV
80	All	125	100	/	50	19	40	6	15.5	6	80	10	160	130	160	145	12	35	225	35	280	100	305
90S	All	140	100	/	56	24	50	8	20	7	90	10	180	140	175	155	12	50	245	35	315	105	345
90L	All	140	125	/	56	24	50	8	20	7	90	10	180	165	175	155	12	50	245	35	340	120	370
100L	All	160	140	/	63	28	60	8	24	7	100	12	200	225	220	190	14	55	295	45	435	185	485
112M	All	190	140	/	70	28	60	8	24	7	112	12	230	230	225	190	15	60	305	45	450	185	500
132S	All	216	140	/	89	38	80	10	33	8	132	12	265	190	260	210	18	65	345	55	465	165	510
132M	All	216	178	/	89	38	80	10	33	8	132	12	265	230	260	210	18	65	345	55	505	185	550
160M	All	254	210	/	108	42	110	12	37	8	160	15	315	260	315	260	20	80	415	65	600	212	650
160L	All	254	254	/	108	42	110	12	37	8	160	15	315	300	315	260	20	80	415	65	640	235	690
180M	All	279	241	/	121	48	110	14	42.5	9	180	15	350	310	360	280	22	105	455	70	690	240	750
180L	All	279	279	/	121	48	110	14	42.5	9	180	15	350	350	360	280	22	105	455	70	730	240	790
200L	All	318	305	/	133	55	110	16	49	10	200	19	390	370	400	305	25	85	505	70	760	185	840
225S	4,6,8	356	286	/	149	60	140	18	53	11	225	19	435	370	450	335	28	110	550	75	810	195	905
225M	2	356	311	/	149	55	110	16	49	10	225	19	435	395	450	335	28	110	550	75	805	195	910
225M	4,6,8	356	311	/	149	60	140	18	53	11	225	19	435	395	450	335	28	110	550	75	835	195	935
250M	2	406	349	/	168	60	140	18	53	11	250	24	485	445	490	365	30	120	620	80	910	215	995
250M	4,6,8	406	349	/	168	65	140	18	58	11	250	24	485	445	490	365	30	120	620	80	910	215	995
280S	2	457	368	/	190	65	140	18	58	11	280	24	545	490	550	400	35	140	675	85	985	215	1070
280S	4,6,8	457	368	/	190	75	140	20	67.5	12	280	24	545	490	550	400	35	140	675	85	985	215	1070
280M	2	457	419	/	190	65	140	18	58	11	280	24	545	540	550	400	35	140	675	85	1035	215	1120
280M	4,6,8	457	419	/	190	75	140	20	67.5	20	280	24	545	540	550	400	35	140	675	85	1035	215	1120
315S	2	508	406	/	216	65	140	18	58	11	315	28	630	570	625	555	49	110	865	120	1190	250	1340
315S	4,6,8	508	406	/	216	80	170	22	71	14	315	28	630	570	625	555	49	110	865	120	1220	250	1370
315M	2	508	457	508	216	65	140	18	58	11	315	28	630	680	625	555	49	110	865	120	1300	250	1450
315M	4,6,8	508	457	508	216	80	170	22	71	14	315	28	630	680	625	555	49	110	865	120	1330	250	1480
315L	2	508	457	508	216	65	140	18	58	11	315	28	630	680	625	555	49	110	865	120	1330	250	1450
315L	4,6,8	508	457	508	216	80	170	22	71	14	315	28	630	680	625	555	49	110	865	120	1330	250	1480
355M	2	610	500	560	254	75	140	20	67.5	12	355	28	730	750	710	/	52	/	1010	120	1525	330	1665
355M	4,6,8	610	500	560	254	95	170	25	86	14	355	28	730	750	710	/	52	/	1010	120	1565	330	1700
355L	2	610	500	560	254	75	140	20	67.5	12	355	28	730	752	710	/	52	/	1010	120	1525	330	1665
355L	4,6,8	610	500	560	254	95	170	25	86	14	355	28	730	750	710	/	52	/	1010	120	1565	330	1700
400M/L	2	686	710	800	280	80	170	22	71	14	400	35	810	1250	810	/	45	/	1075	120	2050	360	2150
400M/L	4,6,8	686	710	800	280	110	210	28	100	16	400	35	810	1250	810	/	45	/	1075	120	2090	360	2180

Frame	B5 Flange				
	M	N	P	S	T
80	165	130	200	4 x 12	4
90	165	130	200	4 x 12	4
100	215	180	250	4 x 15	4
112	215	180	250	4 x 15	4
132	265	230	300	4 x 15	4
160	300	250	350	4 x 19	5
180	300	250	350	4 x 19	5
200	350	300	400	4 x 19	5
225	400	350	450	8 x 19	5
250	500	450	550	8 x 19	5
280	500	450	550	8 x 19	5
315	600	550	660	8 x 24	6
355	740	680	800	8 x 24	6
400	940	880	1000	8 x 28	6

B14A Flange				
M	N	P	S	T
100	80	120	M6	3
115	95	140	M8	3
130	110	160	M8	3.5
130	110	160	M8	3.5
165	130	200	M10	4

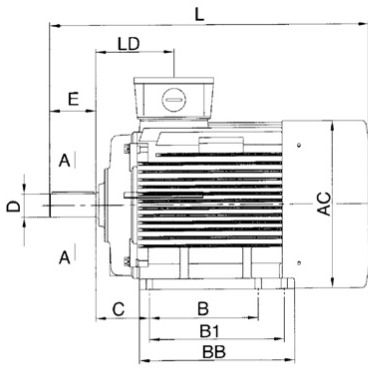
B14B Flange					Frame
M	N	P	S	T	
130	110	160	M8	3.5	80
130	110	160	M8	3.5	90
165	130	200	M10	3.5	100
165	130	200	M10	3.5	112
215	180	250	M12	4	132

Terminal Box			
Frame	Cable Entry	Frame	Cable Entry
80 ~ 100	1 x M20 x 1.5	250 ~ 280	2 x M63 x 1.5
112 ~ 132	1 x M25 x 1.5	315	2 x M63 x 1.5
160 ~ 180	2 x M32 x 1.5	355 ~ 400	4 x M63 x 1.5
200 ~ 225	2 x M50 x 1.5		

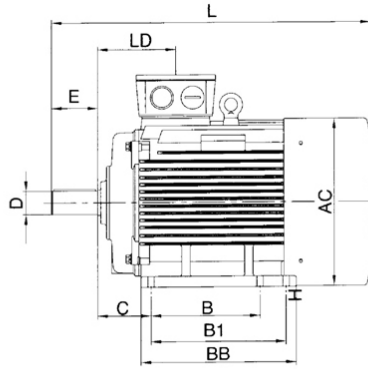
All dimensions are in mm and subject to change without notice.



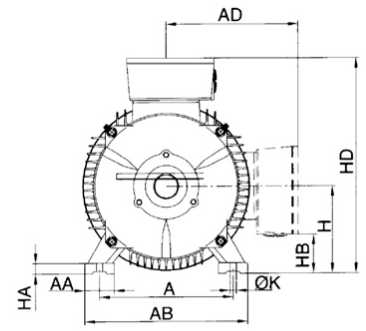
B3



80-90

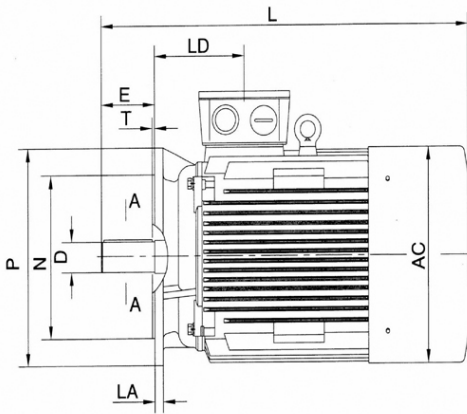


100-400

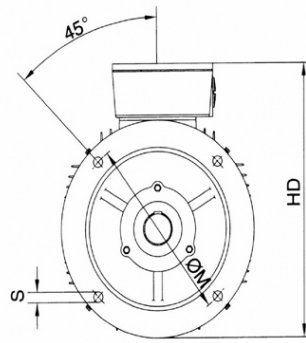


80-400

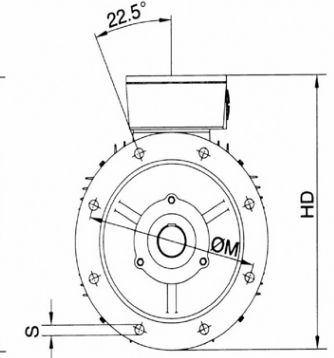
B5



80-280

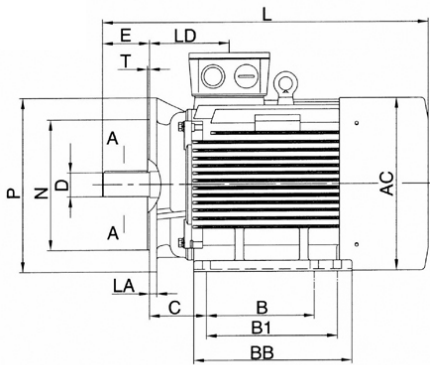


80-200

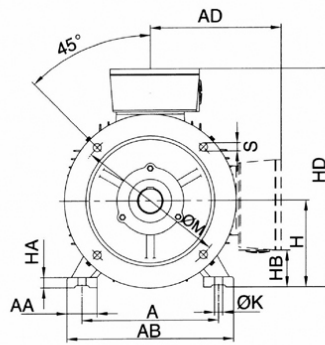


225-280

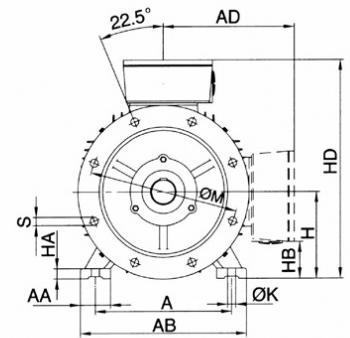
B3 / B5



80-400

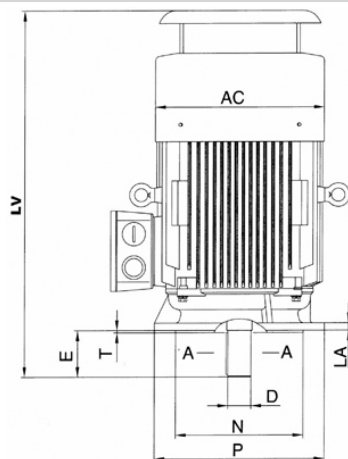


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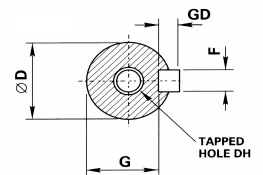


225-400

V1



Shaft & Keyway



Tapped Hole (DH)

Frame	80	90	100	112	132	160	180
	M6	M8	M10	M12	M16		
Frame	200	225	280	315	355	400	
	M20			M24			



Noise (50Hz)

KW	Synchronous Speed r/min			
	3000	1500	1000	750
	Sound Pressure Level dB(A) – No Load			
0.09	/	44	41	/
0.12	49	45	41	/
0.18	50	45	42	/
0.25	50	46	42	/
0.37	52	46	44	/
0.55	52	46	44	/
0.75	52	46	45	45
1.1	52	47	45	45
1.5	54	47	47	48
2.2	54	49	48	50
3	56	49	52	51
4	58	51	53	51
5.5	62	52	53	52
7.5	62	52	58	52
11	73	56	58	54
15	73	56	59	56
18.5	73	57	62	58
22	77	59	62	58
30	78	62	63	60
37	78	65	64	62
45	79	65	66	62
55	80	68	66	63
75	81	72	68	63
90	81	72	68	63
110	82	74	68	63
132	82	74	68	67
160	83	75	69	67
200	83	75	70	67
250	85	78	70	67
315	85	78	73	70
355	85	78	73	70
400	88	80	73	71
450	88	80	73	71
500	88	82	73	/
560	88	82	/	/
630	88	82	/	/

Bearings

Frame Size AHE / HE	Drive End (B3, B5 & B14)		Non Drive End (B3, B5 & B14)	
	2 Pole	4, 6 & 8 Pole	2 Pole	4, 6 & 8 Pole
	56	6201 ZZ		6201 ZZ
63	6201 ZZ		6201 ZZ	
71	6202 ZZ		6202 ZZ	
80	6204 ZZ		6204 ZZ	
90	6205 ZZ/C3		6205 ZZ/C3	
100	6206 ZZ/C3		6206 ZZ/C3	
112	6306 ZZ/C3		6306 ZZ/C3	
132	6308 ZZ/C3		6308 ZZ/C3	
160	6309 ZZ/C3		6309 ZZ/C3	
180	6311 ZZ/C3		6311 ZZ/C3	
200	6312 ZZ/C3		6312 ZZ/C3	
225	6313 ZZ/C3		6313 ZZ/C3	
250	6314 ZZ/C3		6314 ZZ/C3	
280	6314 C3	6317 C3	6314 C3	6317 C3
315	6317 C3	6319 C3 (NU319)	6317 C3	6319 C3
355	6319 C3	6322 C3 (NU322)	6319 C3	6320 C3
400	6319 C3	6326 C3 (NU326)	6319 C3	6326 C3
Frame Size	Drive End (V1)		Non Drive End (V1)	
	2 Pole	4, 6 & 8 Pole	2 Pole	4, 6 & 8 Pole
	315	315	6319 C3 (NU319)	7317
355	355	6322 C3 (NU322)	7319	7320
400	400	6326 C3 (NU326)	7319	7326

- Bearing Sizes in brackets are optional
- All design data subject to change without notice
- Noise levels based on single speed ratings.
- Two speed and multi-speed motor noise levels may be higher



ML & MY Single Phase Motors

ML Series Capacitor Start / Capacitor Run

General purpose applications, requiring high starting torque

Type	Rated Output KW	Full Load @ 50Hz				Locked Current ----- Rated Current	Locked Torque ----- Rated Torque	Max. Torque ----- Rated Torque	Capacitor				Net Kg
		Rpm	Amps		Eff. %				Start		Run		
			240V	480V					uF	Vac	uF	Vac	

2 Pole

ML 8012	0.75	2800	4.5	-	74	4.3	1.9	1.65	150	250	20	450	9.8
ML 8022	1.1	2800	6.1	-	77	4.6	1.9	1.7	200	250	30	450	11
ML 90S2	1.5	2800	8.5	-	78	6.5	2.0	1.7	200	250	35	450	15
ML 90L2	2.2	2800	12.9	-	82	6.5	2.0	1.7	300	300	40	450	16.5

4 Pole

ML 6324	0.18	1400	1.30	-	74	5.2	2.4	2.2	35	250	8	450	4.6
ML 7124	0.37	1400	2.6	-	65	5.9	3.4	2.3	75	250	16	450	7.6
ML 8014	0.55	1400	3.5	-	73	6.1	2.0	1.8	100	250	20	450	9.6
ML 8024	0.75	1400	4.5	-	78	4.9	1.7	1.7	150	250	25	450	10.7
ML 90S4	1.1	1400	6.1	-	78	3.2	1.8	1.7	200	250	40	450	14.5
ML 90L4	1.5	1400	8.5	-	79	5.8	2.0	1.6	200	250	45	450	16.5
ML 100L14*	2.2	1450	12.0	6.5	81	6.0	1.7	1.7	300	250	55	450	23

MY Series Permanent Capacitor Run For pump, fan and blower applications

2 Pole

MY 5622	0.12	2730	0.89		58	4.5	0.45	1.7	-	-	6	450	3.5
MY 6312	0.18	2740	1.4		63	4.5	0.45	1.7	-	-	6	450	4.5
MY 6322	0.25	2740	1.6		65	4.5	0.45	1.7	-	-	8	450	5.1
MY 7112	0.37	2760	2.7		68	4.5	0.45	1.7	-	-	12	450	6.2
MY 7122	0.55	2760	3.8		69	4.5	0.45	1.7	-	-	16	450	6.2
MY 8012	0.75	2780	4.73		70	4.5	0.50	1.7	-	-	30	450	9
MY 8022	1.1	2800	6.5		71	4.5	0.50	1.7	-	-	35	450	10.8
MY 90S2	1.5	2800	8.9		72	5.0	0.50	1.7	-	-	40	450	12
MY 90L2	2.2	2800	12.9		73	5.0	0.50	1.7	-	-	40	450	13.5

4 Pole

MY 5624	0.09	1340	0.91		49	4.5	0.55	1.7	-	-	6	450	3.5
Y 6324	0.18	1400	1.4		58	3.4	0.74	2.2	-	-	10	450	5.4
MY 7114	0.25	1400	2.0		60	3.1	0.49	2.1	-	-	14	450	6.0
MY 7124	0.37	1400	2.6		65	3.5	0.48	2.3	-	-	16	450	7.4
MY 8014	0.55	1400	3.5		70	3.1	0.55	1.8	-	-	20	450	9.5
MY 8024	0.75	1400	4.5		74	3.0	0.42	1.55	-	-	25	450	10.5
MY 90S4	1.1	1400	7.0		69	5.0	0.50	1.7	-	-	40	450	13
MY 90L4	1.5	1400	8.5		80	5.0	0.41	1.6	-	-	45	450	15

6 Pole

MY 7116	0.18	910	1.3		57	4.5	0.35	1.3	-	-	10	450	6.5
MY 7126	0.25	900	1.8		67	2.0	0.35	1.3	-	-	10	450	6.8
MY 8016	0.37	910	2.5		62	4.5	0.65	1.7	-	-	12	450	9.5
MY 8026	0.55	900	3.5		67	2.0	0.35	1.3	-	-	18	450	10.7
MY 90S6	0.75	910	5.2		68	4.5	0.35	1.4	-	-	30	450	12
MY 90L6	1.1	900	6.5		74	2.6	0.35	1.4	-	-	35	450	15



ML Series & MY Series - Main Dimensions

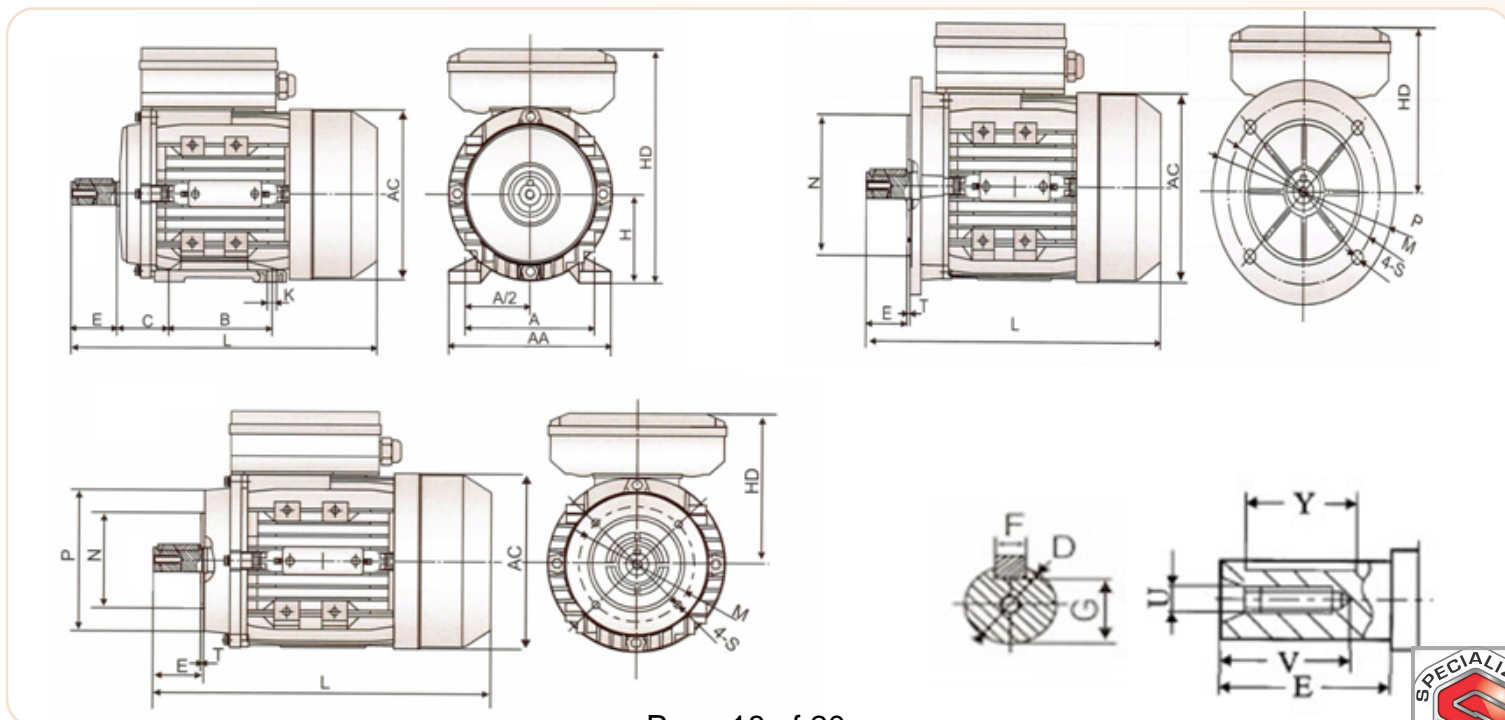
Frame	A	B	C	D	E	F	G	Y	U	V	H	K	HD	AA	AC	BB	L
MY 56 ML 56	90	71	36	9	20	3	7.2	14	M4	10	56	6	146	112	110	90	191
MY 63 ML 63	100	80	40	11	23	4	8.5	14	M4	10	63	7	180	122	122	100	215
MY 71 ML 71	112	90	45	14	30	5	11	20	M5	13	71	7	195	137	144	112	243
MY 80 ML 80	125	100	50	19	40	6	15.5	30	M6	16	80	10	222	152	160 173	122	285
MY 90S ML 90S	140	100	56	24	50	8	20	40	M8	20	90	10	242	169	182	153	334
MY 90L ML 90L2 ML 90L4	140	125	56	24	50	8	20	40	M8	20	90	10	242	169	182	153	334 357 334
ML100L14 ML 100L24	160	140	63	28	60	8	24	45	M10	24	100	12	261	192	202	185	370 433

Flange Dimensions

Frame	B5 Flange						B14A Flange					B14B Flange (Opt **)				
	M	N	P	LA	S	T	M	N	P	S	T	M	N	P	S	T
56	100	80	120	9	7	3	65	50	80	M5	2.5	85	70	105	M6	2.5
63	115	95	140	9	10	3	75	60	90	M5	2.5	100	80	120	M6	3
71	130	110	160	10	10	3.5	85	70	105	M6	2.5	115	95	140	M8	3
80	165	130	200	12	12	3.5	100	80	120	M6	3	130	110	160	M8	3.5
90S/L	165	130	200	12	12	3.5	115	95	140	M8	3	130	110	160	M8	3.5
100L	215	180	250	13	15	4	130	110	160	M8	3.5	165	130	200	M10	3.5

Bearing Sizes

Frame	56	63	71	80	90	100	112	132	160
DE	6201-2RS	6201-2RS	6202-2RS	6204-2RS	6205-2RS	6206-2RS	6306-2RS	-	-
NDE	6201-2RS	6201-2RS	6202-2RS	6204-2RS	6205-2RS	6206-2RS	6306-2RS	-	-



Other EMT products and services

High Voltage Motors

- o High voltage motors at 3,3kV, 6,6kV and 11kV.
- o kW ratings from 400kW to 10,000kW
- o Cast Iron motors to 500mm frame approximately 1000kW
- o Fabricated frame motors to 1000mm and 10,000kW
- o Motors designed to suit application
- o All mounting arrangements B3 B5 B35 and Vertical
- o Slipring motors available in all mount variations
- o We manufacture bespoke new for old replacements

Variable Speed Drives

- o Full range to suit all EMT OMEC motors
- o Single phase VSDs 240V to three phase 240V
- o Three phase drives all voltages
- o Various IP ratings available as well as full cabinets

Motor repair services

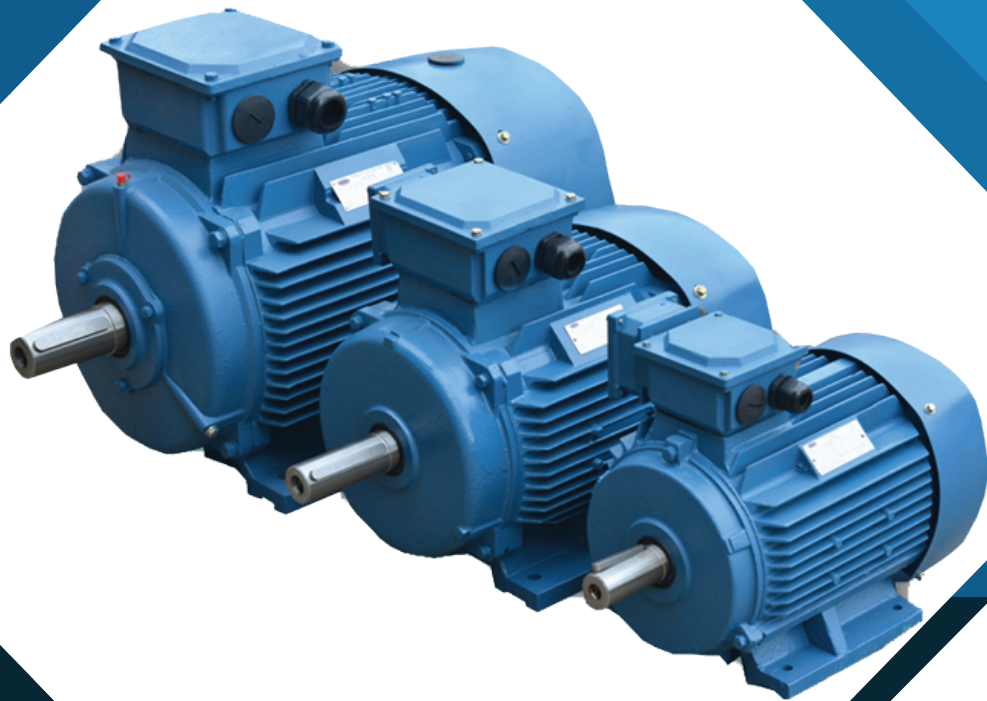
- o Full Motor rewind and repair facility within our own works
- o Motor service contracts undertaken
- o Installation and alignment services
- o Fabrication of special mounting bases adaptors

Engineering Services

- o General Mechanical and Electrical engineering services
- o Machining of special components

EMT Projects

- o EMT's project division undertakes complete plant upgrade projects.
- o The team has many years of experience in the maintenance and upgrade of Plant and Equipment and can also undertake longer term project based work.



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