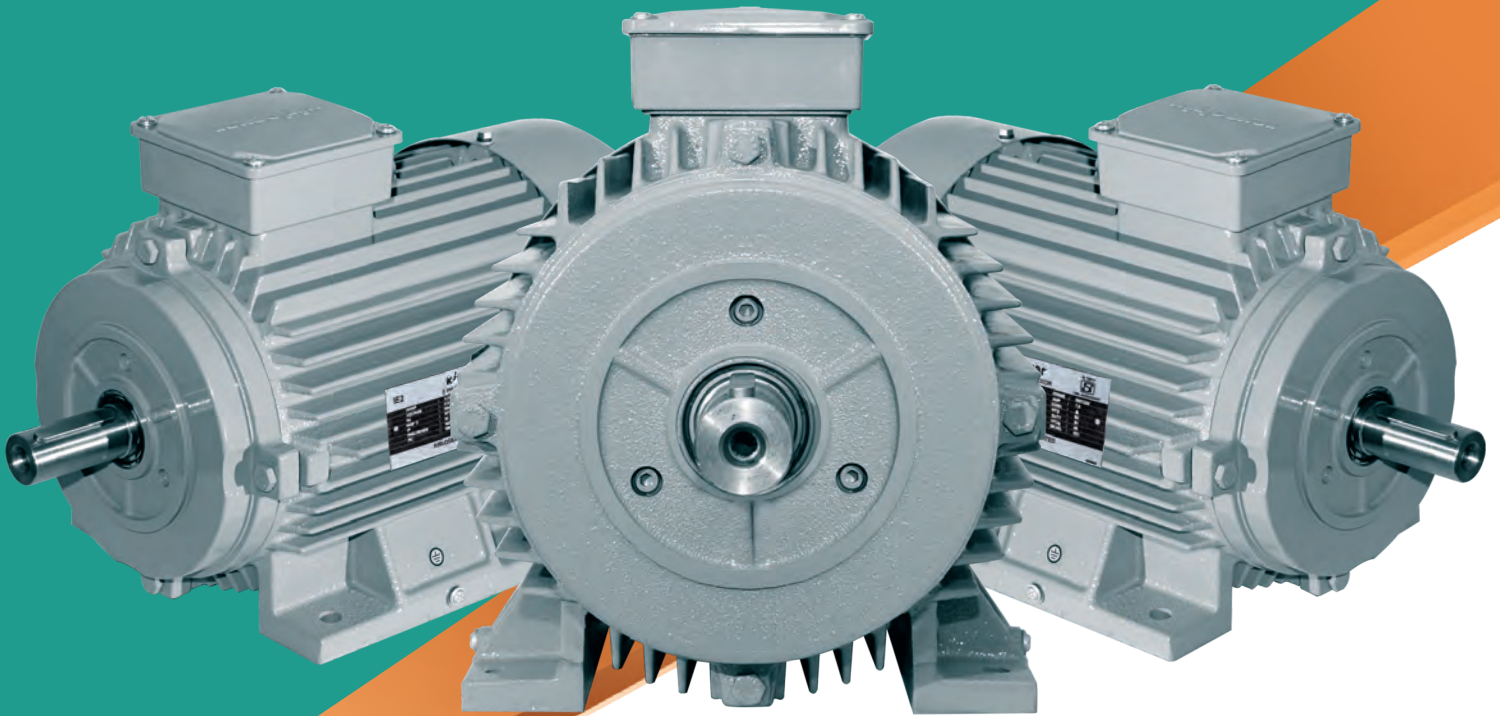


PRODUCT CATALOG

LOW VOLTAGE 3-PHASE INDUCTION MOTORS



Performance Beyond Expectations

karloskar
motors

Our Values:



EXCELLENCE

In everything we do, quality without compromise



INTEGRITY

Say what we do, and do what we say



COLLABORATION

We grow with people and partners



EMPATHY

Towards all Stakeholders
We always listen, and learn



VALUE CREATION

Towards all Stakeholders
We're building for a shared prosperous future



INNOVATIVE THINKING

Be bold and brave, & stay relevant

Contents:

1	Reference Standards:	1
2	Tolerance for Electrical Performance:	2
3	Standard Specifications for Three Phase Induction Motors-IE2:	3
4	Bearing Details:	4
5	Cable Sizes and Cable Entry:	5
6	Performance Data for IE2 Range:	6
7	Dimensional Drawing:	
	➤ KM63 & KM71	9
	➤ KM80 to KM132	11
	➤ KM160 to KM200	14
8	Terminal Box Arrangement:	
	➤ KM63 & KM71	16
	➤ KM80 to KM132	17
	➤ KM160	18
	➤ KM180 & KM200	19
9	Exploded View:	20
10	Product Code Guide:	21

**Low Voltage 3-Phase
Induction Motors : IE2**

Reference Standards:

All Kirloskar Motors shall comply with the latest International and Indian Standards.

These are as under:

List of International Standards:

1. IEC60034-1: Rotating Electrical Machines, Part-1; Rating and Performance.
2. IEC60034-2-1 Standard Methods for Determining Losses and Efficiency.
3. IEC60034-5: Degree of Protection.
4. IEC60034-6: Method of Cooling.
5. IEC60034-9: Noise Limits.
6. IEC60034-14: Mechanical Vibrations Measurement, Evaluation and Limits of Severity.
7. IEC60034-30: Efficiency Classes of Single Speed Three Phase Squirrel Cage Induction Motors.
8. IEC60072-1: Dimensions and Output Ratings of Electrical Machines.

List of Indian Standards:

1. IS1231: Dimensions of Three Phase Induction Motors- Foot Mounted.
2. IS2223: Dimensions of Flange Mounted AC Induction Motors.
3. IS2253: Designations of Types of Construction and Mounting Arrangements for Rotating Electrical Machines.
4. IS4029: Guide for Testing Three Phase Induction Motors.
5. IS4691: Degree of Protection Provided by Enclosures for Rotating Electrical Machinery.
6. IS4889: Methods of Determination of Efficiency of Rotating Electrical Machines.
7. IS6362: Designation of Method of Cooling for Rotating Electrical Machines.
8. IS7538: Three Phase Squirrel Cage Induction Motors for Centrifugal Pumps for Agricultural Applications.
9. IS12065: Permissible Limits of Noise Levels for Rotating Electrical Machines.
10. IS12075: Mechanical Vibrations of Rotating Electrical Machines; Measurements, Evaluations and Limits of Vibration Severity.
11. IS12615: Efficiency Classes and Performance Specification.
12. IS15999: Rotating Electrical Machines.
13. IS8151: Single Speed Three Phase Induction Motors for Lifts.

Tolerance for Electrical Performance:

As per IEC 60034-1, the following tolerances are permitted:

- Efficiency η at

kW \leq 150 kW: -15% of $(1 - \eta)$

kW $>$ 150 kW: -10% of $(1 - \eta)$

Where η is a efficiency mentioned in decimals.

- Power factor = $-1/6 (1 - \cos\phi)$
Minimum absolute value: 0.02
Maximum absolute value: 0.07
- $P_N < 1$ kW : $\pm 30\%$ of the slip
- $P_N > 1$ kW : $\pm 20\%$ of the slip
- Locked-rotor current / Starting Current / SCC: +20% of Full Load Current (FLC)
- Locked-rotor torque / Starting Torque / STT: -15% to +25 % of indicated value.
- Breakdown torque / Pull out Torque / POT: -10% of indicated value.
- Moment of inertia (or GD^2) $\pm 10\%$ of the value.

Voltage and Frequency Variation:

- As per IS 12615 : 2018, motors shall be capable of delivering rated output with:
 - a. Terminal voltage differing from its rated value by not more than $\pm 10\%$
 - b. Frequency differing from its rated value by not more than $\pm 5\%$
 - c. Combined variation - The sum of absolute percent variation of (a) and (b) not exceeding 10%.

In the case of continuous operation at the extreme voltage limits specified at (a) and (b), the temperature rise limits of the winding specified in IS 15999 (Part 1)/IEC 60034-1 shall not exceed by more than 20 K.

In such cases, motor may be designed with higher class of insulation.

Motors operated under the extreme conditions of voltage and/or frequency specified in (a) and (b), the performance values given in the Selection tables may not necessarily comply with IS 12615

Efficiency and Power Factor:

The nominal efficiency (η) and the power factor ($\cos\phi$) for motors is listed in the tables.

Efficiency and other performance figures are committed at rated voltage and frequency.

Rated Speed and Direction of Rotation:

The rated speeds are applicable for the rated data. The synchronous speed changes proportionally with the line frequency. The motors are suitable for bi-directional rotation.

Default direction of rotation is Clockwise from DE when L1,L2 and L3 are connected to U1,V1 and W1 respectively. Counter clockwise rotation is achieved by interchanging any of the two phases.

Rated torque:

The rated torque in kg-m delivered at the motor shaft is

$$T = (974 \times P)/N$$

Where P is power in kW & N is Full Load Speed in RPM.

Motors in frames KM180 & KM200 are provided with 3 no. PTC 130 as a standard feature.

Standard Specifications for Three Phase Induction Motors-IE2:

Unless specified, all Kirloskar Motors shall comply with the following specifications:

Sr No	Parameters	Details
1	Power In kW	0.12 to 37
2	Pole	2P, 4P, 6P, 8P*
3	Frame Sizes	KM63 to KM200L
4	Operating Voltage	415V +/- 10%
5	Frequency	50 Hz +/- 5%
6	Combined Variation	10% (Absolute)
7	Enclosure	Totally Enclosed Fan Cooled (TEFC)
8	Degree of Protection	IP55
9	Efficiency Level	IE2 as per IS12615:2018
10	Frame Dimensions	As per IS 1231 / IS 2223 / IEC 60072
11	Insulation Class	Class F with Temperature Rise Limited to Class B
12	Design Ambient Temperature	50°C
13	Temperature Rise	70°C (By Resistance Method)
14	Altitude	≤ 1000 Meters from Mean Sea Level
15	Relative Humidity	Upto 95%.
16	Atmospheric Conditions	Tropical Corrosive
17	Duty	S1-Continuous
18	Type of Rotor	Squirrel Cage
19	Dynamic Balancing	Grade 2.5 as per ISO 1940
20	Motor Mounting	IMB3 , IMB5* , IMB35* , IMV1* , IMB14** & IMB34**
21	Mechanical Dimensions	As per GA Drawings
22	General Enclosure Material	Frames KM63 & KM71- Aluminum Frame / CI Endshield Frames KM80 to KM200 Cast Iron
23	Type of Cooling	Externally Fan Cooled- IC411 as per IS6362
24	Position of Terminal Box	TOP
25	Type of Starting	For Motors < 2.20 KW : Direct On-Line For Motors ≥ 2.20 KW: Direct On-Line / Star Delta.
26	Connection / No. of Leads	Star connection / 3 lead for 63 & 71 frame Star connection / 6 lead for 80 to 100 frame and < 2.2kW Delta connection / 6 lead for 100 to 200 frame and ≥ 2.2 kW
27	Terminal Arrangement	Stud Type
28	Type of Coupling	Direct-Flexible
29	Direction of Rotation	Bi-Directional
30	Bearings	Deep Groove Anti-Friction Ball Bearings. As per Table on Page No. 4
31	Greasing Arrangement	Greased for Life (L-10, 40000 Hrs.)
32	Bearing Seals	Oil Seals
33	Vibration Levels	IS12075
34	Noise Levels	IS12065
35	Paint Shade	RAL7046 (Tele-grey)
36	Electrical Performance	As per IS12615:2018 and performance data

*On Request

** For 63 to 132 Frame

Bearings Details:

All Kirloskar Motors are provided with appropriately sized Deep Groove Ball Bearings.

Deep Groove Ball Bearings are the most popular and widely used bearing types. These have low friction and are optimized for low noise and low vibration which enables high rotational speeds.

The Deep Groove accommodate radial and axial loads in both directions, are easy to mount, and require less maintenance than other bearing types.

The frame wise bearing sizes are as under:

Sr. No.	Frame	DE Bearing	NDE Bearing
1	KM63	6202ZZ	6201ZZ
2	KM71	6203ZZ	6202ZZ
3	KM80	6204ZZ	6203ZZ
4	KM90S	6205ZZ	6204ZZ
5	KM90L	6205ZZ	6204ZZ
6	KM100L	6206ZZ	6205ZZ
7	KM112M	6206ZZ	6205ZZ
8	KM132S	6308ZZ	6208ZZ
9	KM132M	6308ZZ	6208ZZ
10	KM160M	6309ZZ	6309ZZ
11	KM160L	6309ZZ	6309ZZ
12	KM180M	6310ZZ	6310ZZ
13	KM180L	6310ZZ	6310ZZ
14	KM200L	6312ZZ	6312ZZ

Cable Sizes and Cable Entry:

All Kirloskar Motors are provided with appropriately sized terminal boxes mounted on TOP for easy access.

The frame wise cable sizes that can be accommodated are as under:

Frame	Cable Size	Cable Entry
KM63	1X3CX4 mm ²	M20 X 1.5 – 1 No.
KM71	1X3CX4 mm ²	M20 X 1.5 – 1 No.
KM80	1X3CX4 mm ²	M20 X 1.5 – 1 No.
KM90S	1X3CX4 mm ²	M20 X 1.5 – 1 No.
KM90L	1X3CX4 mm ²	M20 X 1.5 – 1 No.
KM100L	2X3CX6 mm ²	M20 X 1.5 – 2 Nos.
KM112M	2X3CX10 mm ²	M25 X 1.5 – 2 Nos.
KM132S	2X3CX10 mm ²	M25 X 1.5 – 2 Nos.
KM132M	2X3CX10 mm ²	M25 X 1.5 – 2 Nos.
KM160M	2X3CX25 mm ²	M25 X 1.5 – 2 Nos.
KM160L	2X3CX25 mm ²	M25 X 1.5 – 2 Nos.
KM180M	2X3CX50 mm ²	M40 X 1.5 – 2 Nos.
KM180L	2X3CX50 mm ²	M40 X 1.5 – 2 Nos.
KM200L	2X3CX70 mm ²	M40 X 1.5 – 2 Nos.

Performance Data - IE2 Efficiency Class Motors:

Motors in frames KM180 & KM200 are provided with 3 no. PTC 130 as a standard feature.

POLE	2 (3000RPM)	AMBIENT	50°C	INSULATION CLASS		Starting Current	Starting Torque	Pull Out Torque	GD ²	Net Weight					
				F	F										
VOLTAGE	415 ±10%	DUTY	S1 <th colspan="2">THERMAL CLASS</th> <th rowspan="2">1/2 FL</th> <th rowspan="2">% FLC</th> <th rowspan="2">% FLT</th> <th rowspan="2">kg-m²</th> <th rowspan="2">kg</th>	THERMAL CLASS		1/2 FL	% FLC	% FLT	kg-m ²	kg					
FREQUENCY	50Hz ±5%			B	B										
COMBINED VARIATION	10%	EFFICIENCY CLASS AS PER IEC 60034-30-1:2014, IS 12615:2018													
Product Code	Output	Frame Size	Rated Speed	FLC	FLT	% Efficiency			Power Factor		Starting Torque	Pull Out Torque	GD ²	Net Weight	
	kW		RPM	A	Kg-m	FL	3/4 FL	1/2 FL	FL	3/4 FL	1/2 FL	% FLT	% FLT	kg-m ²	kg
KM2.0T18.AEA.B03.TSS	0.18	KM63	2860	0.77	0.06	60.4	60.4	58.0	0.54	0.43	0.35	170	220	0.0081	4.6
KM2.0T25.AEA.B03.TSS	0.25	KM63	2860	0.84	0.09	64.8	64.8	63.0	0.64	0.54	0.44	170	220	0.0081	4.6
KM2.0T37.AFA.B03.TSS	0.37	KM71	2830	1.10	0.13	69.5	68.0	64.0	0.67	0.64	0.56	180	240	0.0026	9.6
KM2.0T55.AFA.B03.TSS	0.55	KM71	2830	1.50	0.19	74.1	73.0	70.0	0.69	0.65	0.57	180	240	0.0026	9.6
KM2.0T75.AGC.B03.TSS	0.75	KM80	2830	1.64	0.26	77.4	76.5	73.5	0.82	0.74	0.62	250	300	0.0037	10
KM2.1T10.AGC.B03.TSS	1.1	KM80	2830	2.34	0.38	79.6	79.6	75.5	0.82	0.75	0.63	270	320	0.0051	11
KM2.1T50.AHC.B03.TSS	1.5	KM90S	2835	3.17	0.52	81.3	81.3	80.0	0.81	0.77	0.66	260	310	0.0057	27
KM2.2T20.AHC.B03.TSS	2.2	KM90L	2810	4.33	0.76	83.2	83.2	82.5	0.85	0.80	0.72	280	330	0.0078	28
KM2.3T70.AIC.B03.TSS	3.7	KM100L	2840	7.1	1.27	85.5	85.5	83.0	0.85	0.82	0.73	280	330	0.0147	36
KM2.5T50.AKC.B03.TSS	5.5	KM132S	2930	10.3	1.83	87.0	87.0	84.5	0.85	0.80	0.72	275	325	0.0619	72
KM2.7T50.AKC.B03.TSS	7.5	KM132S	2930	13.9	2.49	88.1	87.7	86.0	0.85	0.80	0.72	275	325	0.0752	75
KM2.11T0.ALC.B03.TSS	11	KM160M	2940	19	3.6	89.4	89.4	87.0	0.88	0.85	0.77	300	325	0.171	112
KM2.15T0.ALC.B03.TSS	15	KM160M	2930	27	5.0	90.3	90.0	88.0	0.86	0.84	0.74	250	300	0.203	121
KM2.18T5.ALC.B03.TSS	18.5	KM160L	2930	33	6.1	90.9	90.5	88.0	0.85	0.82	0.74	300	350	0.268	135
KM2.22T0.AMC.B03.TSS	22	KM180M	2945	39	7.3	91.3	91.0	88.8	0.87	0.83	0.75	200	250	0.34	185
KM2.30T0.ANC.B03.TSS	30	KM200L	2955	51	9.9	92.0	92.0	90.0	0.89	0.86	0.80	260	310	0.61	236
KM2.37T0.ANC.B03.TSS	37	KM200L	2955	64	12.2	92.5	92.5	91.0	0.87	0.84	0.76	220	270	0.61	240

Performance Data - IE2 Efficiency Class Motors:

Motors in frames KM180 & KM200 are provided with 3 no. PTC 130 as a standard feature.

Product Code	Output kW	Frame Size	Rated Speed RPM	FLC A	FLT Kg-m	% Efficiency			Power Factor			Starting Current % FLC	Starting Torque % FLT	Pull Out Torque % FLT	GD ² kg-m ²	Net Weight kg
						FL	3/4 FL	1/2 FL	FL	3/4 FL	1/2 FL					
POLE 4 (1500RPM) AMBIENT 50°C INSULATION CLASS F VOLTAGE 415 ±10% DUTY S1 THERMAL CLASS B FREQUENCY 50Hz ±5% EFFICIENCY CLASS AS PER IEC 60034-30-1:2014, IS 12615:2018 COMBINED VARIATION 10%																
KM2.0T12.BEA.B03.TSS	0.12	KM63	1320	0.54	0.09	59.1	58.2	46.0	0.53	0.43	0.31	550	170	220	0.0079	4.9
KM2.0T18.BEA.B03.TSS	0.18	KM63	1320	0.59	0.13	64.7	64.0	55.0	0.66	0.57	0.46	550	225	275	0.0079	4.9
KM2.0T25.BFA.B03.TSS	0.25	KM71	1405	0.69	0.17	68.5	68.5	64.3	0.74	0.64	0.51	550	250	300	0.0026	6.6
KM2.0T37.BFA.B03.TSS	0.37	KM71	1405	0.97	0.26	72.7	69.8	66.0	0.73	0.62	0.48	600	200	250	0.0026	6.6
KM2.0T55.BGC.B03.TSS	0.55	KM80	1410	1.64	0.38	77.1	76.3	71.4	0.61	0.51	0.38	600	170	220	0.006	13
KM2.0T75.BGC.B03.TSS	0.75	KM80	1410	1.85	0.52	79.6	79.6	74.0	0.71	0.65	0.53	500	200	250	0.006	14
KM2.1T10.BHC.B03.TSS	1.1	KM90S	1430	2.47	0.75	81.4	81.4	79.0	0.76	0.69	0.55	600	250	300	0.014	25
KM2.1T50.BHC.B03.TSS	1.5	KM90L	1430	3.23	1.02	82.8	82.8	80.5	0.78	0.72	0.60	600	275	325	0.015	28
KM2.2T20.BIC.B03.TSS	2.2	KM100L	1435	4.84	1.49	84.3	84.3	82.5	0.75	0.67	0.55	650	200	250	0.028	36
KM2.3T70.BJC.B03.TSS	3.7	KM112M	1430	7.6	2.52	86.3	86.3	85.0	0.79	0.74	0.60	650	260	310	0.051	45
KM2.5T50.BKC.B03.TSS	5.5	KM132S	1450	10.6	3.69	87.7	87.7	86.0	0.82	0.76	0.64	650	250	300	0.130	72
KM2.7T50.BKC.B03.TSS	7.5	KM132M	1450	14	5.04	88.7	88.7	87.0	0.84	0.76	0.65	650	250	300	0.152	80
KM2.11T0.BLC.B03.TSS	11	KM160M	1450	21	7.4	89.8	89.8	88.5	0.83	0.80	0.76	650	175	225	0.18	110
KM2.15T0.BLC.B03.TSS	15	KM160L	1450	27	10.1	90.6	90.6	89.5	0.85	0.83	0.78	650	175	225	0.23	133
KM2.18T5.BMC.B03.TSS	18.5	KM180M	1455	33	12.4	91.2	91.2	89.5	0.85	0.82	0.73	650	250	300	0.30	185
KM2.22T0.BMC.B03.TSS	22	KM180L	1465	40	14.6	91.6	91.6	89.8	0.84	0.80	0.72	650	200	250	0.54	190
KM2.30T0.BNC.B03.TSS	30	KM200L	1470	53	19.9	92.3	92.0	90.0	0.86	0.82	0.72	700	260	310	0.61	236

Performance Data - IE2 Efficiency Class Motors:

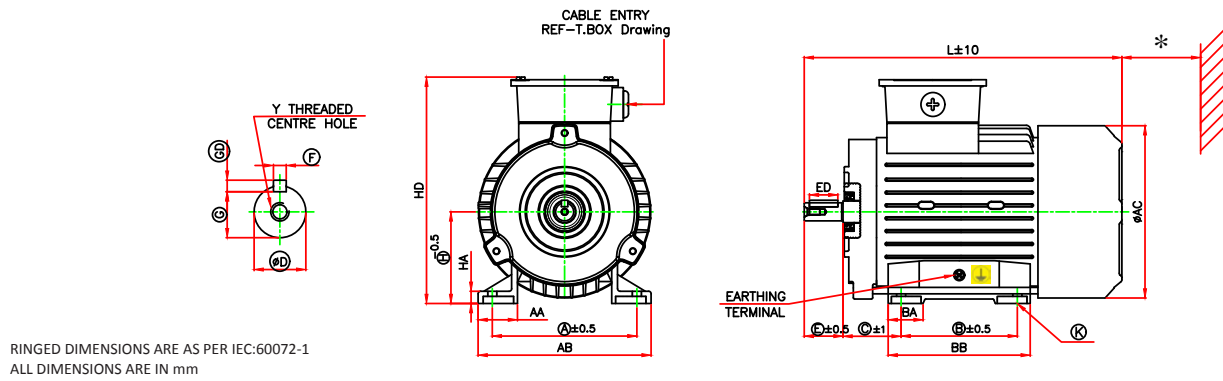
Motors in frames KM180 & KM200 are provided with 3 no. PTC 130 as a standard feature.

Product Code	Output kW	Frame Size	Rated Speed RPM	FLC A	FLT Kg-m	% Efficiency			Power Factor			Starting Current % FLC	Starting Torque % FLT	Pull Out Torque % FLT	GD ² kg-m ²	Net Weight kg
						FL	3/4 FL	1/2 FL	FL	3/4 FL	1/2 FL					
KM2.0T75.CHC.B03.TSS	0.75	KM90S	930	2.08	0.79	75.9	75.0	69.0	0.66	0.56	0.45	500	200	250	0.020	28
KM2.1T10.CHC.B03.TSS	1.1	KM90L	920	2.97	1.16	78.1	78.1	74.0	0.66	0.56	0.45	500	200	250	0.016	29
KM2.1T50.CIC.B03.TSS	1.5	KM100L	945	3.79	1.55	79.8	77.0	73.0	0.69	0.60	0.46	500	200	250	0.046	32
KM2.2T20.CJC.B03.TSS	2.2	KM112M	945	5.35	2.27	81.8	81.8	79.8	0.70	0.65	0.50	550	210	260	0.079	43
KM2.3T70.CKC.B03.TSS	3.7	KM132S	950	8.5	3.79	84.3	84.3	83.5	0.72	0.65	0.50	600	200	250	0.181	68
KM2.5T50.CKC.B03.TSS	5.5	KM132M	960	12.4	5.58	86.0	86.0	85.0	0.72	0.66	0.54	550	200	250	0.207	76
KM2.11T0.CLC.B03.TSS	11	KM160L	970	22	11.0	88.7	88.7	87.0	0.78	0.73	0.62	600	200	250	0.231	144

POLE 6 (1000RPM) AMBIENT 50°C INSULATION CLASS F
 VOLTAGE 415 ±10% DUTY S1 THERMAL CLASS B
 FREQUENCY 50Hz ±5% EFFICIENCY CLASS AS PER IEC 60034-30-1:2014, IS 12615:2018
 COMBINED VARIATION 10%

Dimensional Drawing For TEFC, Foot Mounted (B3) Motors:

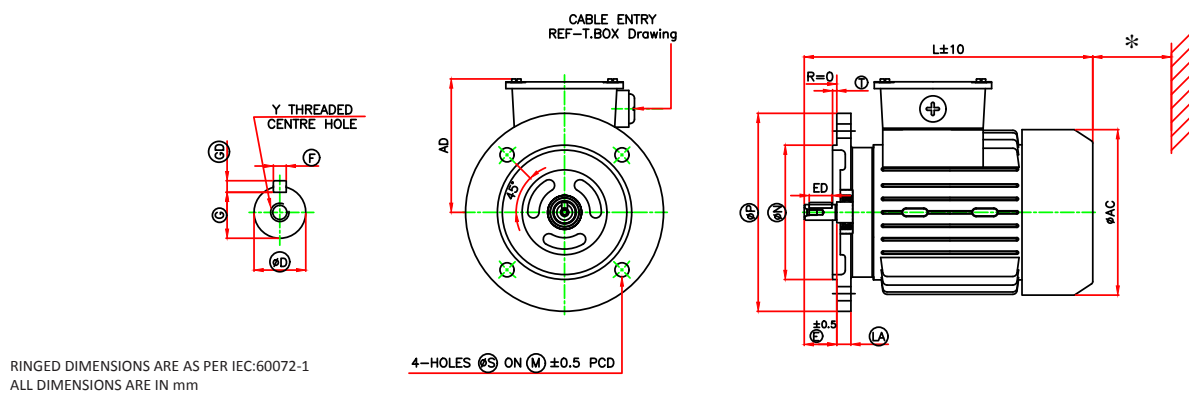
Frames: KM63 & KM71



FRAME	FOOT FIXING							OVER ALL							SHAFT						
	A	B	B1	C	H TOL.	AA	AB	BA	BB	K	AC	L	HD	HA	D TOL.	E	ED	F TOL.	GD TOL.	G	Y
KM63	100	80	--	40	63 / 62.5	27	118	25	96	7/6.6	117	217	157	9	11.008/10.997	23	16	4/3.97	4/3.97	8.5/8.4	M4X12
KM71	112	90	--	45	71 / 70.5	30	134	27	108	7/6.6	135	250	175	9	14.008/13.997	30	22	5/4.97	5/4.97	11.0/10.9	M5X12

Dimensional Drawing For TEFC, Flange Mounted (B5) Motors:

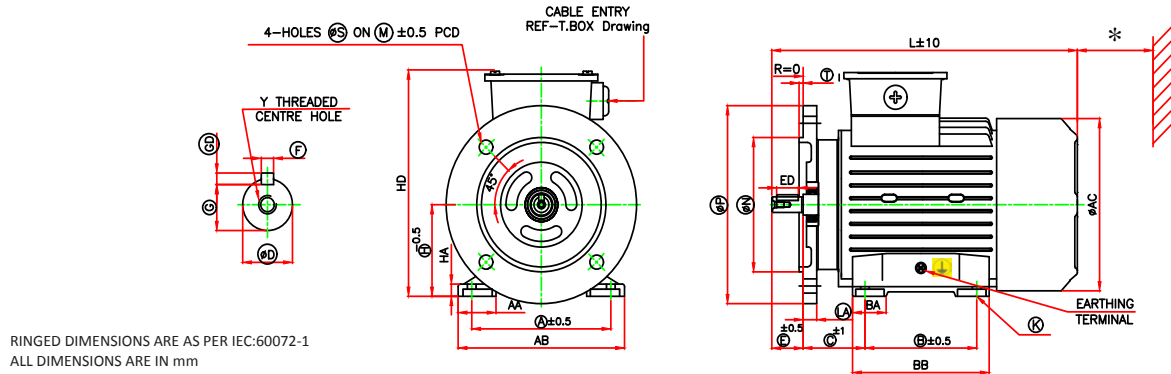
Frames: KM63 & KM71



FRAME	FLANGE FIXING						OVER ALL				SHAFT						
	M TOL.	N TOL.	P	S	T	LA	AC	L	AD	D TOL.	E	ED	F TOL.	GD TOL.	G	Y	
KM63	115	95.013/94.991	140	10	3.0	9	117	207	95	11.008/10.997	23	16	4/3.97	4/3.97	8.5/8.4	M4X12	
KM71	130	110.013/109.991	160	10	3.5	10	135	246	105	14.008/13.997	30	22	5/4.97	5/4.97	11.0/10.9	M5X12	

* 80 mm MINIMUM DISTANCE TO BE MAINTAINED BY USER FOR EFFECTIVE COOLING

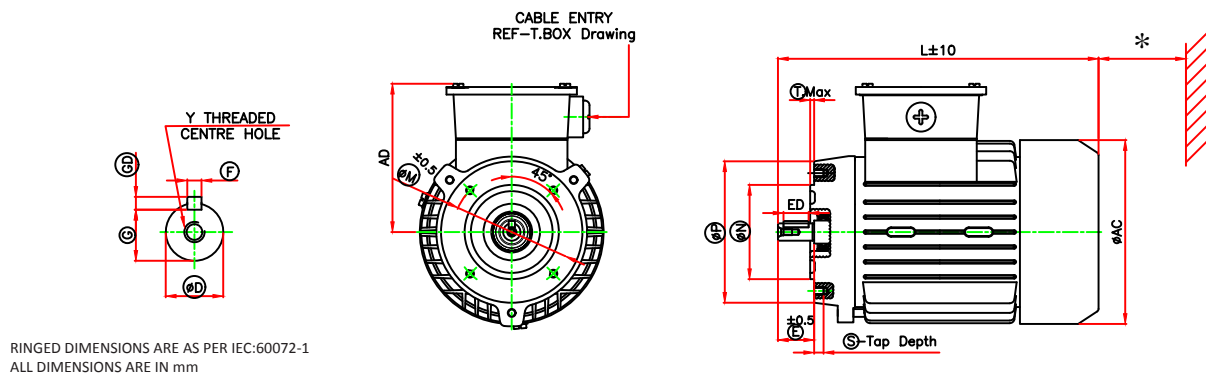
Dimensional Drawing For TEFC, Foot Cum Flange Mounted (B35) Motors: Frames: KM63 & KM71



FRAME	FOOT FIXING										OVER ALL				SHAFT						
	A	B	B1	C	H TOL.	AA	AB	BA	BB	K	AC	L	HD	HA	D TOL.	E	ED	F TOL.	GD TOL.	G	Y
KM63	100	80	--	40	63/62.5	27	118	25	96	7/6.6	117	217	157	9	11.008/10.997	23	16	4/3.97	4/3.97	8.5/8.4	M4X12
KM71	112	90	--	45	71/70.5	30	134	27	108	7/6.6	135	250	175	9	14.008/13.997	30	22	5/4.97	5/4.97	11.0/10.9	M5X12

FRAME	FLANGE FIXING					
	M TOL.	N TOL.	P	S	T	LA
KM63	115	95.013/94.991	140	10	3.0	9
KM71	130	110.013 / 109.991	160	10	3.5	10

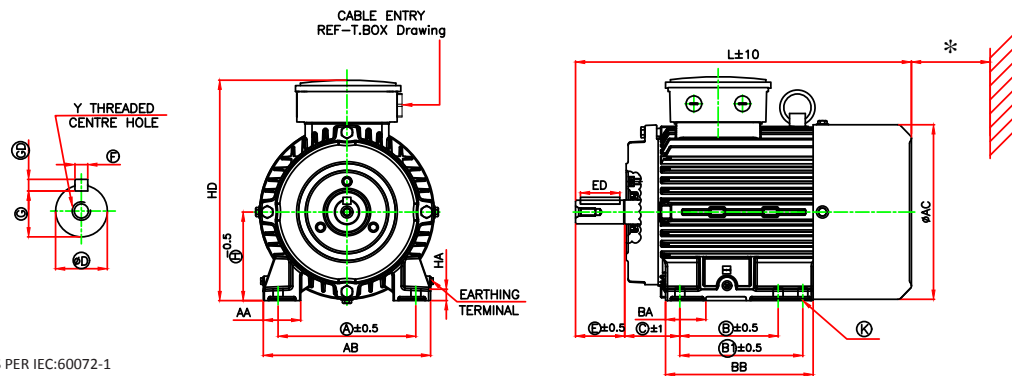
Dimensional Drawing For TEFC, Face Mounted (B14) Motors: Frames: KM63 & KM71



FRAME	FACE FIXING						OVER ALL			SHAFT					
	M TOL.	N TOL.	P	S	T	AC	L	AD	D TOL.	E	ED	F TOL.	GD TOL.	G	Y
KM63	75	60.012/59.993	90	M5X6	2.5	117	207	95	11.008/10.997	23	16	4/3.97	4/3.97	8.5/8.4	M4X12
KM71	85	70.012/69.993	105	M6X8	2.5	135	246	105	14.008/13.997	30	22	5/4.97	5/4.97	11.0/10.9	M5X12

* 80 mm MINIMUM DISTANCE TO BE MAINTAINED BY USER FOR EFFECTIVE COOLING

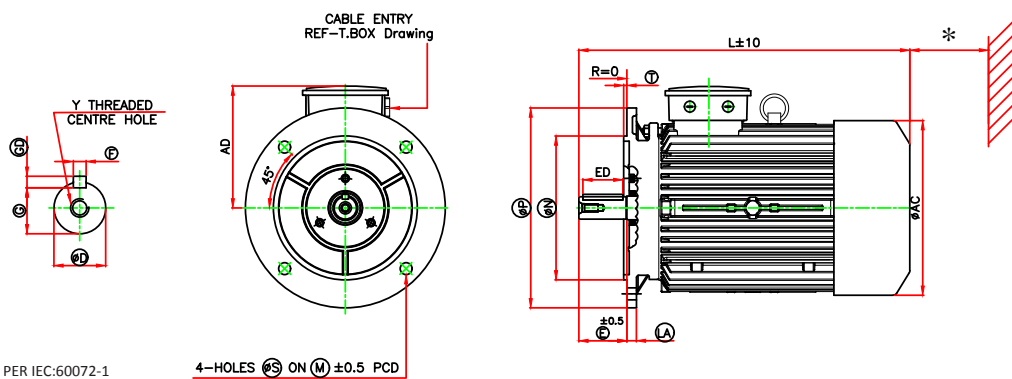
Dimensional Drawing For TEFC, Foot Mounted (B3) Motors: Frames: KM80 to KM132



RINGED DIMENSIONS ARE AS PER IEC:60072-1
ALL DIMENSIONS ARE IN mm

FRAME	FOOT FIXING										OVER ALL				SHAFT						
	A	B	B1	C	H TOL.	AA	AB	BA	BB	K	AC	L	HD	HA	D TOL.	E	ED	F TOL.	GD TOL.	G	Y
KM80	125	100	--	50	80/79.5	35	152	43	127	10/10.5	156	290	207	11	19.009/18.996	40	28	6/5.97	6/5.97	15.5/15.4	M6X16
KM90S	140	100	125	56	90/89.5	38	170	41	149	10/10.5	178	340	227	11	24.009/23.996	50	40	8/7.964	7.0/6.9	20.0/19.9	M8X19
KM90L	140	100	125	56	90/89.5	38	170	36	160	10/10.5	178	355	227	11	24.009/23.996	50	40	8/7.964	7.0/6.9	20.0/19.9	M8X19
KM100L	160	140	--	63	100/99.5	52	200	58	190	12/12.5	198	410	245	15	28.009/27.996	60	50	8/7.964	7.0/6.9	24.0/23.9	M10X24
KM112M	190	140	--	70	112/111.5	48	220	68	198	12/12.5	220	422	268	15	28.009/27.996	60	50	8/7.964	7.0/6.9	24.0/23.9	M10X24
KM132S	216	140	178	89	132/131.5	52	244	44	221	12/12.5	258	495	305	15	38.018/38.002	80	70	10/9.954	8.0/7.9	33.0/32.9	M12X28
KM132M	216	140	178	89	132/131.5	54	244	60	240	12/12.5	258	520	305	15	38.018/38.002	80	70	10/9.954	8.0/7.9	33.0/32.9	M12X28

Dimensional Drawing For TEFC, Flange Mounted (B5) Motors: Frames: KM80 to KM132

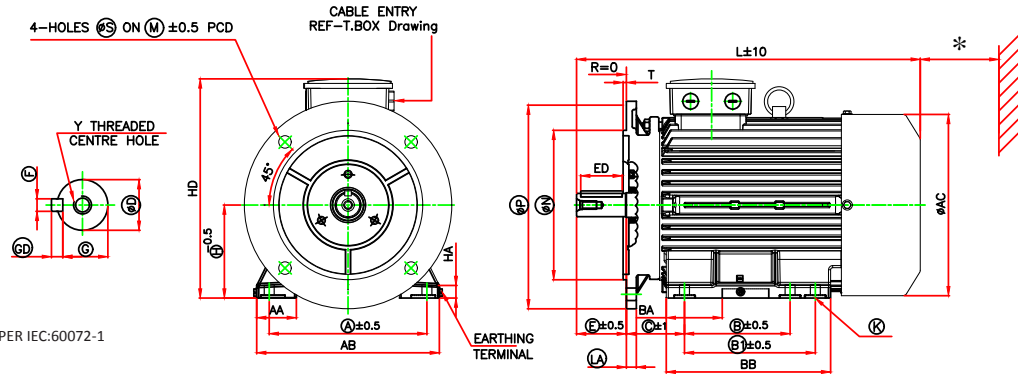


RINGED DIMENSIONS ARE AS PER IEC:60072-1
ALL DIMENSIONS ARE IN mm

FRAME	FLANGE FIXING					OVER ALL			SHAFT						
	M TOL.	N TOL.	P	S	T	AC	L	AD	D TOL.	E	ED	F TOL.	GD TOL.	G	Y
KM80	165	130.014/129.989	200	12	3.5	156	290	128	19.009/18.996	40	28	6/5.97	6/5.97	15.5/15.4	M6X16
KM90S	165	130.014/129.989	200	12	3.5	178	340	138	24.009/23.996	50	40	8/7.964	7.0/6.9	20.0/19.9	M8X19
KM90L	165	130.014/129.989	200	12	3.5	178	355	138	24.009/23.996	50	40	8/7.964	7.0/6.9	20.0/19.9	M8X19
KM100L	215	180.014/179.989	250	15	4	195	410	145	28.009/27.996	60	50	8/7.964	7.0/6.9	24.0/23.9	M10X24
KM112M	215	180.014/179.989	250	15	4	220	422	156	28.009/27.996	60	50	8/7.964	7.0/6.9	24.0/23.9	M10X24
KM132S	265	230.016/229.987	300	15	4	258	495	175	38.018/38.002	80	70	10/9.954	8.0/7.9	33.0/32.9	M12X28
KM132M	265	230.016/229.987	300	15	4	258	520	175	38.018/38.002	80	70	10/9.954	8.0/7.9	33.0/32.9	M12X28

* 80 mm MINIMUM DISTANCE TO BE MAINTAINED BY USER FOR EFFECTIVE COOLING

Dimensional Drawing For TEFC, Foot Cum Flange Mounted (B35) Motors: Frames: KM80 to KM132

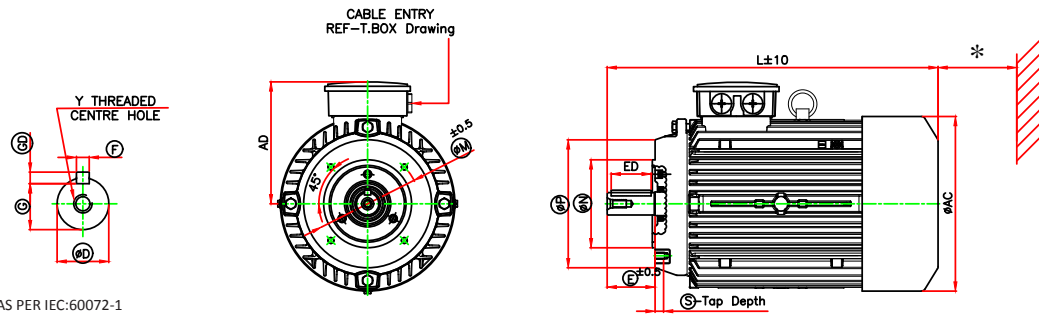


FRAME	FOOT FIXING										OVER ALL				SHAFT						
	A	B	B1	C	H TOL.	AA	AB	BA	BB	K	AC	L	HD	HA	D TOL.	E	ED	F TOL.	GD TOL.	G	Y
KM80	125	100	--	50	80/79.5	35	152	43	127	10/10.5	156	290	207	11	19.009/18.996	40	28	6/5.97	6/5.97	15.5/15.4	M6X16
KM90S	140	100	125	56	90/89.5	38	170	41	149	10/10.5	178	340	227	11	24.009/23.996	50	40	8/7.964	7.0/6.9	20.0/19.9	M8X19
KM90L	140	100	125	56	90/89.5	38	170	36	160	10/10.5	178	355	227	11	24.009/23.996	50	40	8/7.964	7.0/6.9	20.0/19.9	M8X19
KM100L	160	140	--	63	100/99.5	52	200	58	190	12/12.5	198	410	245	15	28.009/27.996	60	50	8/7.964	7.0/6.9	24.0/23.9	M10X24
KM112M	190	140	--	70	112/111.5	48	220	68	198	12/12.5	220	422	268	15	28.009/27.996	60	50	8/7.964	7.0/6.9	24.0/23.9	M10X24
KM132S	216	140	178	89	132/131.5	52	244	44	221	12/12.5	258	495	305	15	38.018/38.002	80	70	10/9.954	8.0/7.9	33.0/32.9	M12X28
KM132M	216	140	178	89	132/131.5	54	244	60	240	12/12.5	258	520	305	15	38.018/38.002	80	70	10/9.954	8.0/7.9	33.0/32.9	M12X28

FRAME	FLANGE FIXING					
	M TOL.	N TOL.	P	S	T	LA
KM80	165	130.014/129.989	200	12	3.5	10
KM90S	165	130.014/129.989	200	12	3.5	10
KM90L	165	130.014/129.989	200	12	3.5	10
KM100L	215	180.014/179.989	250	15	4	11
KM112M	215	180.014/179.989	250	15	4	11
KM132S	265	230.016/229.987	300	15	4	12
KM132M	265	230.016/229.987	300	15	4	12

* 80 mm MINIMUM DISTANCE TO BE MAINTAINED BY USER FOR EFFECTIVE COOLING

Dimensional Drawing For TEFC, Face Mounted (B14) Motors: Frames: KM80 to KM132

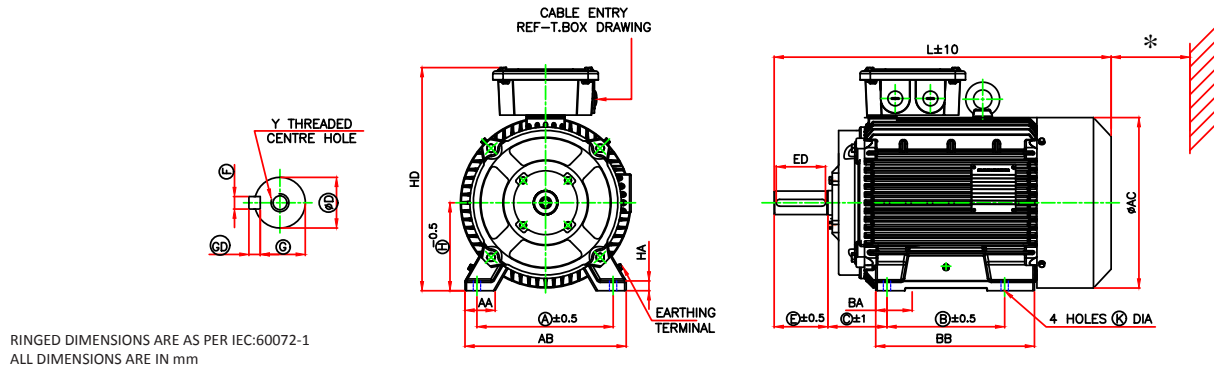


RINGED DIMENSIONS ARE AS PER IEC:60072-1
ALL DIMENSIONS ARE IN mm

FRAME	FACE FIXING					OVER ALL			SHAFT						
	M TOL.	N TOL.	P	S	T	AC	L	AD	D TOL.	E	ED	F TOL.	GD TOL.	G	Y
KM80	100	80.012/79.993	120	M6X8	3.0	156	290	127	19.009/18.996	40	28	6/5.97	6/5.97	15.5/15.4	M6X16
KM90S	115	95.013/94.991	140	M8X10	3.0	178	340	137	24.009/23.996	50	40	8/7.964	7.0/6.9	20.0/19.9	M8X19
KM90L	115	95.013/94.991	140	M8X10	3.0	178	355	137	24.009/23.996	50	40	8/7.964	7.0/6.9	20.0/19.9	M8X19
KM100L	130	110.013/109.991	160	M8X10	3.5	198	410	145	28.009/27.996	60	50	8/7.964	7.0/6.9	24.0/23.9	M10X24
KM112M	130	110.013/109.991	160	M8X10	3.5	220	422	155	28.009/27.996	60	50	8/7.964	7.0/6.9	24.0/23.9	M10X24
KM132S	165	130.014/129.989	200	M10X12	3.5	258	495	173	38.018/38.002	80	70	10/9.954	8.0/7.9	33.0/32.9	M12X28
KM132M	165	130.014/129.989	200	M10X12	3.5	258	520	173	38.018/38.002	80	70	10/9.954	8.0/7.9	33.0/32.9	M12X28

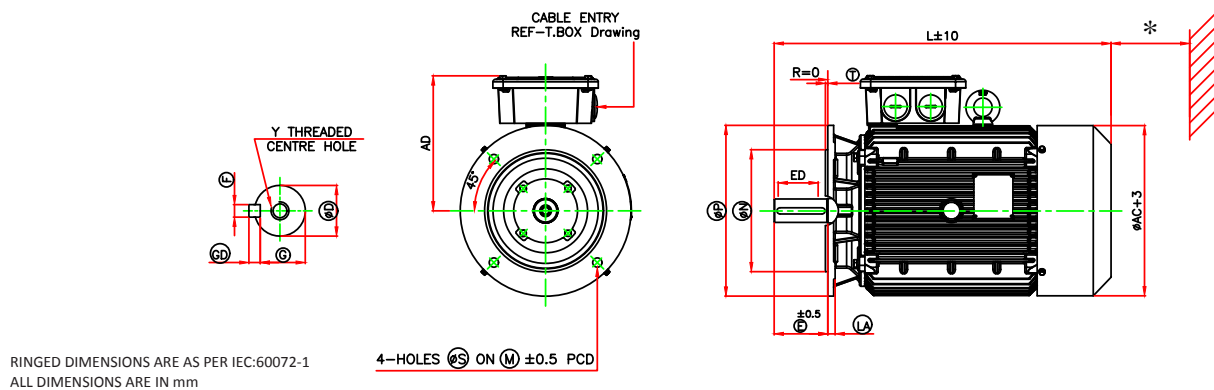
* 80 mm MINIMUM DISTANCE TO BE MAINTAINED BY USER FOR EFFECTIVE COOLING

Dimensional Drawing For TEFC, Foot Mounted (B3) Motors: Frames: KM160 to KM200



FRAME	FOOT FIXING									OVER ALL				SHAFT						
	A	B	C	H TOL.	AA	AB	BA	BB	K	AC	L	HD	HA	D TOL.	E	ED	F TOL.	GD TOL.	G	Y
KM160M	254	210	108	160/159.5	60	314	60	266	15/15.5	309	600	382	20	42.018/42.002	110	100	12/11.957	8.0/7.9	37.0/36.9	M16X32
KM160L	254	254	108	160/159.5	60	314	60	309	15/15.5	309	644	382	20	42.018/42.002	110	100	12/11.957	8.0/7.9	37.0/36.9	M16X32
KM180M	279	241	121	180/179.5	62	330	97	325	15/15.5	349	690	457	20	48.018/48.002	110	100	14/13.957	9.0/8.9	42.5/42.4	M16X32
KM180L	279	279	121	180/179.5	62	330	97	325	15/15.5	349	690	457	20	48.018/48.002	110	100	14/13.957	9.0/8.9	42.5/42.4	M16X32
KM200L	318	305	133	200/199.5	87	390	71	368	19/19.5	384	750	497	24	55.030/55.011	110	100	16/15.957	10.0/9.9	49.0/48.9	M20X40

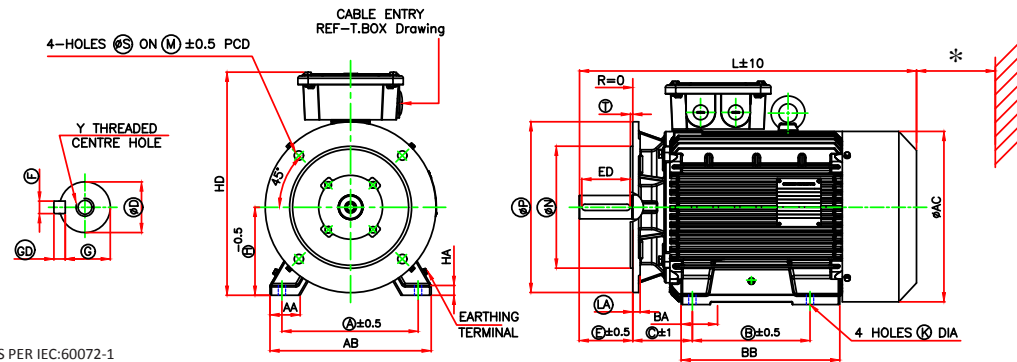
Dimensional Drawing For TEFC, Flange Mounted (B5) Motors: Frames: KM160 to KM200



FRAME	FLANGE FIXING						OVER ALL				SHAFT						
	M TOL.	N TOL.	P	S	T	LA	AC	L	AD	D TOL.	E	ED	F TOL.	GD TOL.	G	Y	
KM160M	300	250.016/249.987	350	19	5	13	309	600	212	42.018/42.002	110	100	12/11.957	8.0/7.9	37.0/36.9	M16X32	
KM160L	300	250.016/249.987	350	19	5	13	309	644	212	42.018/42.002	110	100	12/11.957	8.0/7.9	37.0/36.9	M16X32	
KM180M/L	300	250.016/249.987	350	19	5	15	349	690	277	48.018/48.002	110	100	14/13.957	9.0/8.9	42.5/42.4	M16X32	
KM200L	350	300.016/299.987	400	19	5	20	384	750	297	55.030/55.011	110	100	16/15.957	10.0/9.9	49.0/48.9	M20X40	

* 100 mm MINIMUM DISTANCE TO BE MAINTAINED BY USER FOR EFFECTIVE COOLING

Dimensional Drawing For TEFC, Foot Cum Flange Mounted (B35) Motors: Frames: KM160 to KM200



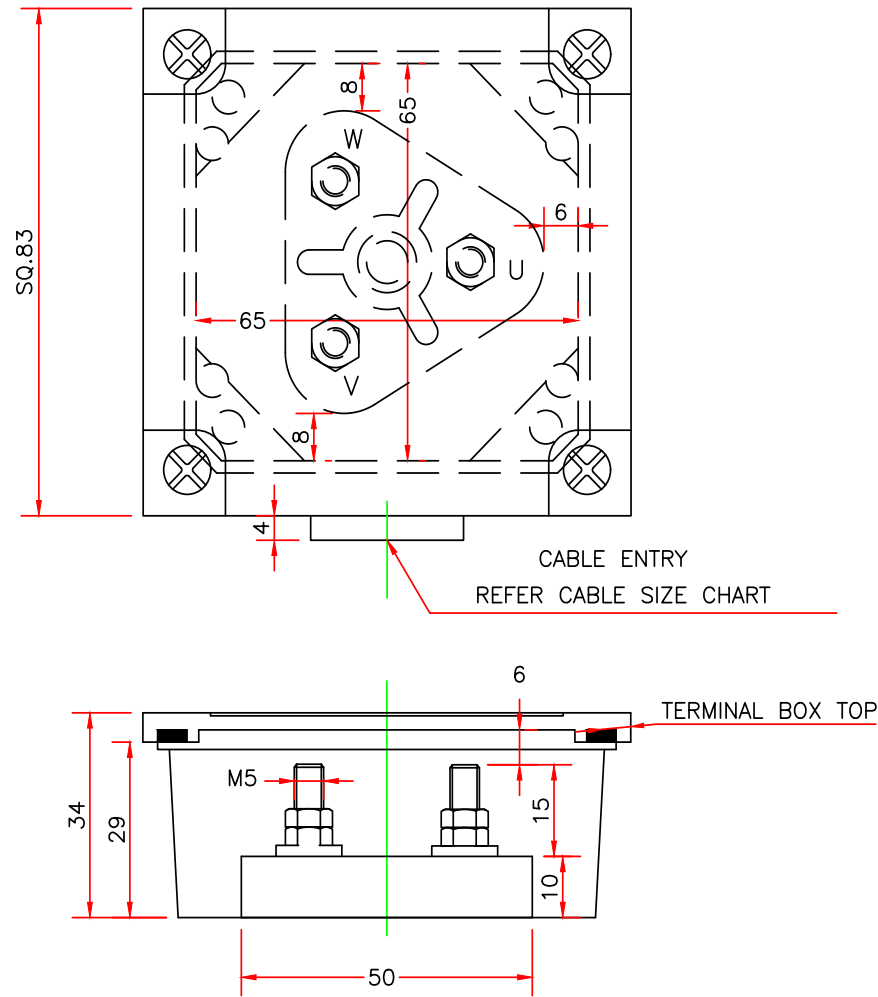
RINGED DIMENSIONS ARE AS PER IEC:60072-1
ALL DIMENSIONS ARE IN mm

FRAME	FOOT FIXING									OVER ALL				SHAFT						
	A	B	C	H TOL.	AA	AB	BA	BB	K	AC	L	HD	HA	D TOL.	E	ED	F TOL.	GD TOL.	G	Y
KM160M	254	210	108	160/159.5	60	314	60	266	15/15.5	309	600	382	20	42.018/42.002	110	100	12/11.957	8.0/7.9	37.0/36.9	M16X32
KM160L	254	254	108	160/159.5	60	314	60	309	15/15.5	309	644	382	20	42.018/42.002	110	100	12/11.957	8.0/7.9	37.0/36.9	M16X32
KM180M	279	241	121	180/179.5	62	330	97	325	15/15.5	349	690	457	20	48.018/48.002	110	100	14/13.957	9.0/8.9	42.5/42.4	M16X32
KM180L	279	279	121	180/179.5	62	330	97	325	15/15.5	349	690	457	20	48.018/48.002	110	100	14/13.957	9.0/8.9	42.5/42.4	M16X32
KM200L	318	305	133	200/199.5	87	390	71	368	19/19.5	384	750	497	24	55.030/55.011	110	100	16/15.957	10.0/9.9	49.0/48.9	M20X40

FRAME	FLANGE FIXING					
	M TOL.	N TOL.	P	S	T	LA
KM160M	300	250.016/249.987	350	19	5	13
KM160L	300	250.016/249.987	350	19	5	13
KM180M/L	300	250.016/249.987	350	19	5	15
KM200L	350	300.016/299.987	400	19	5	20

* 100 mm MINIMUM DISTANCE TO BE MAINTAINED BY USER FOR EFFECTIVE COOLING

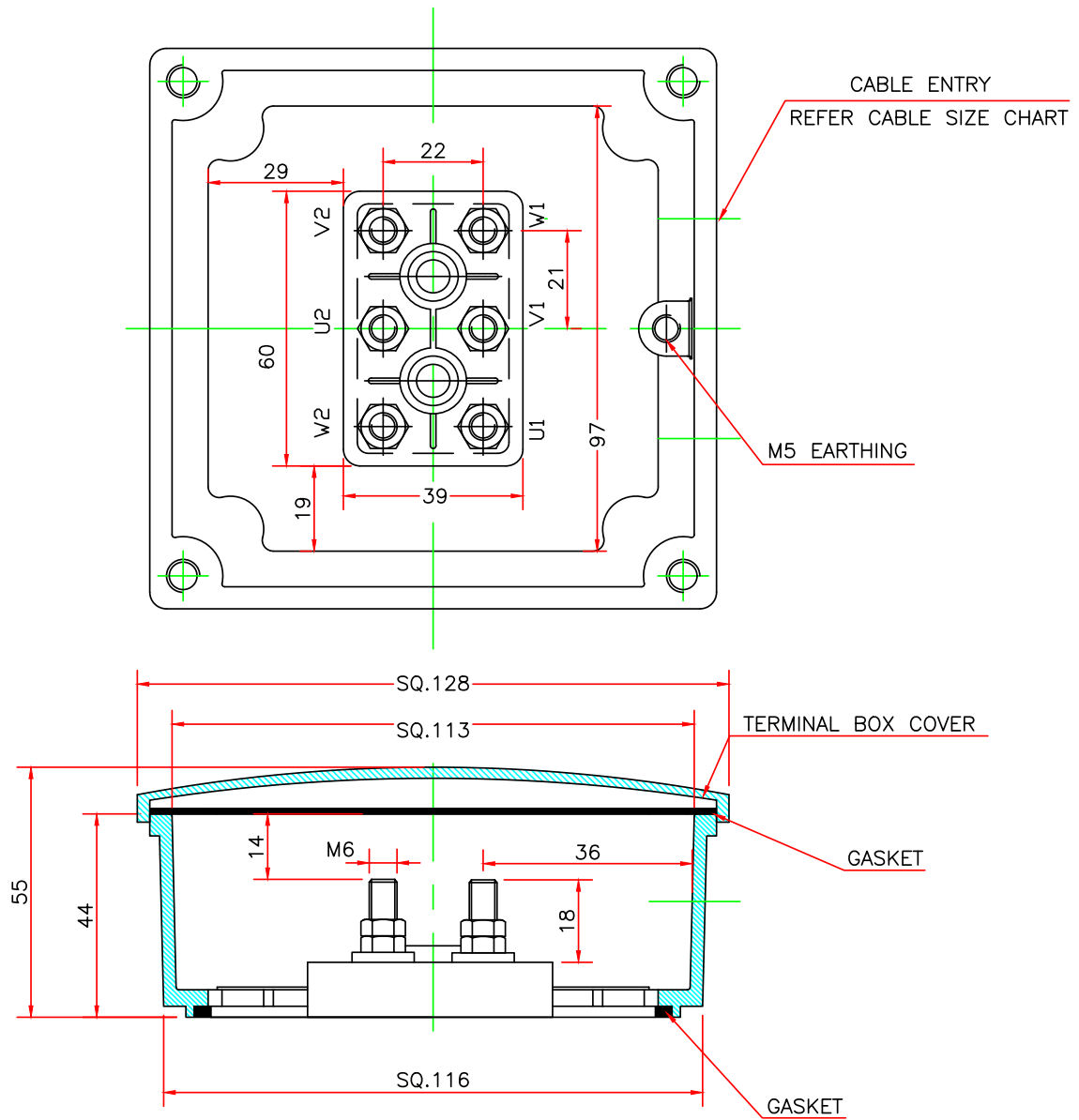
**Terminal Box Arrangement:
Frames: KM63 & KM71**



NOTES:

- * TERMINAL BOX CAN BE ROTATED IN 360° IN STEPS OF 90°.
- * ONE EARTHING TERMINAL IS PROVIDED INSIDE THE MAIN TERMINAL BOX.
- * CABLE GLANDS ARE NOT IN KIRLOSKAR SCOPE OF SUPPLY.

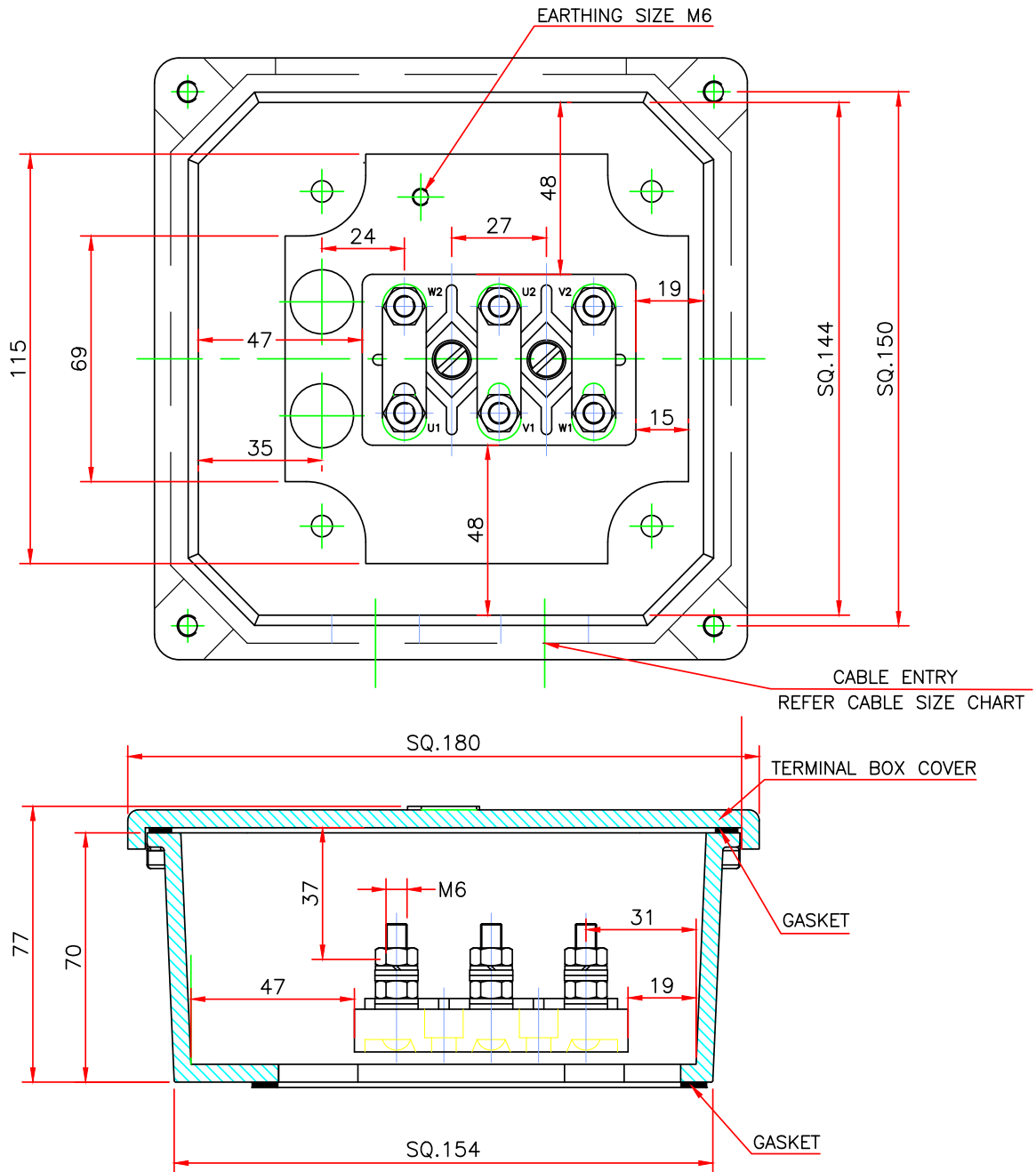
Terminal Box Arrangement: Frames: KM80 to KM132



NOTES:

- * TERMINAL BOX CAN BE ROTATED IN 360* IN STEPS OF 90*.
- * ONE EARTHING TERMINAL IS PROVIDED INSIDE THE MAIN TERMINAL BOX.
- * CABLE GLANDS ARE NOT IN KIRLOSKAR SCOPE OF SUPPLY.

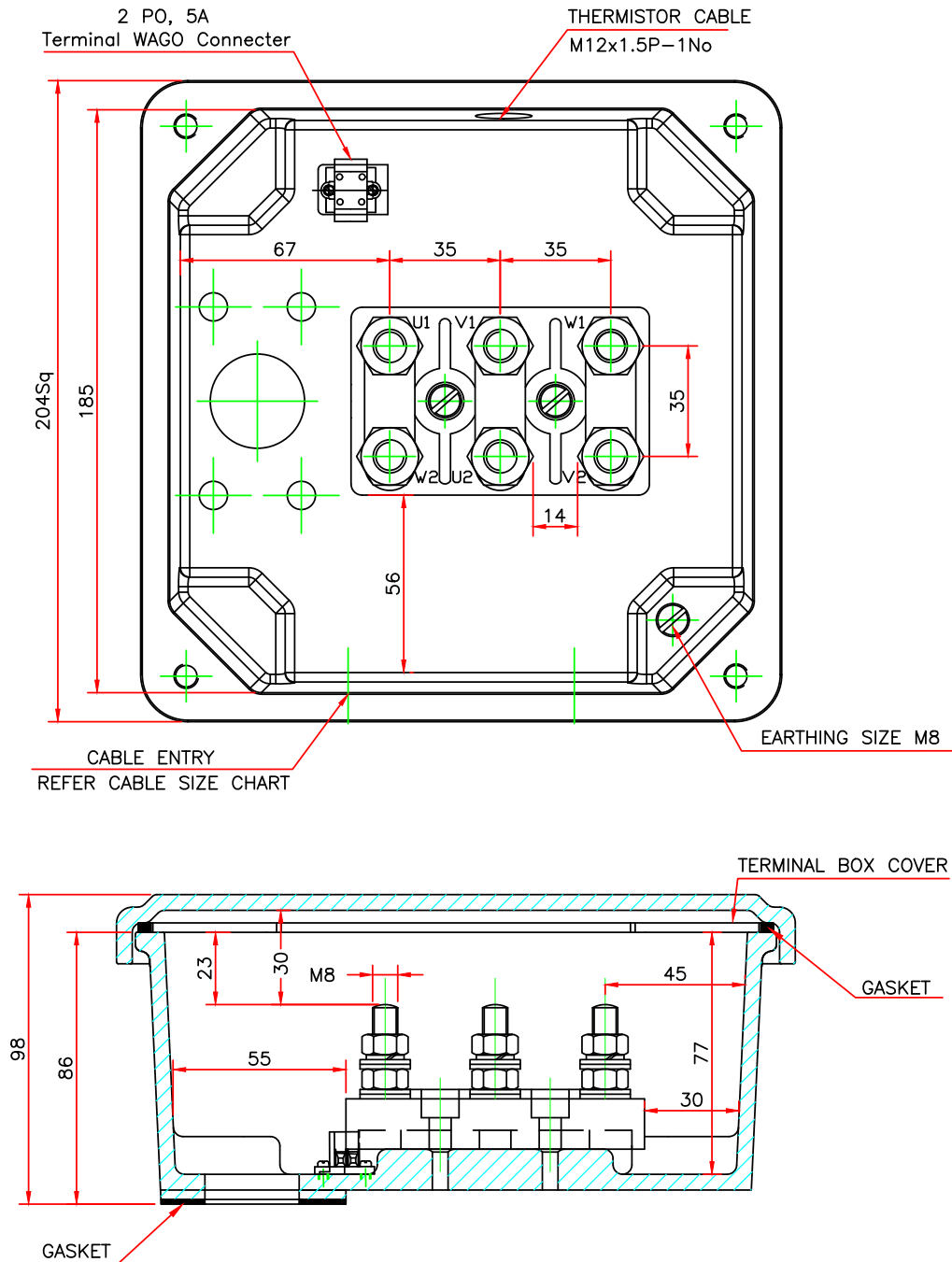
Terminal Box Arrangement: Frames: KM160



NOTES:

- * TERMINAL BOX CAN BE ROTATED IN 360* IN STEPS OF 90*.
- * ONE EARTHING TERMINAL IS PROVIDED INSIDE THE MAIN TERMINAL BOX.
- * CABLE GLANDS ARE NOT IN KIRLOSKAR SCOPE OF SUPPLY.

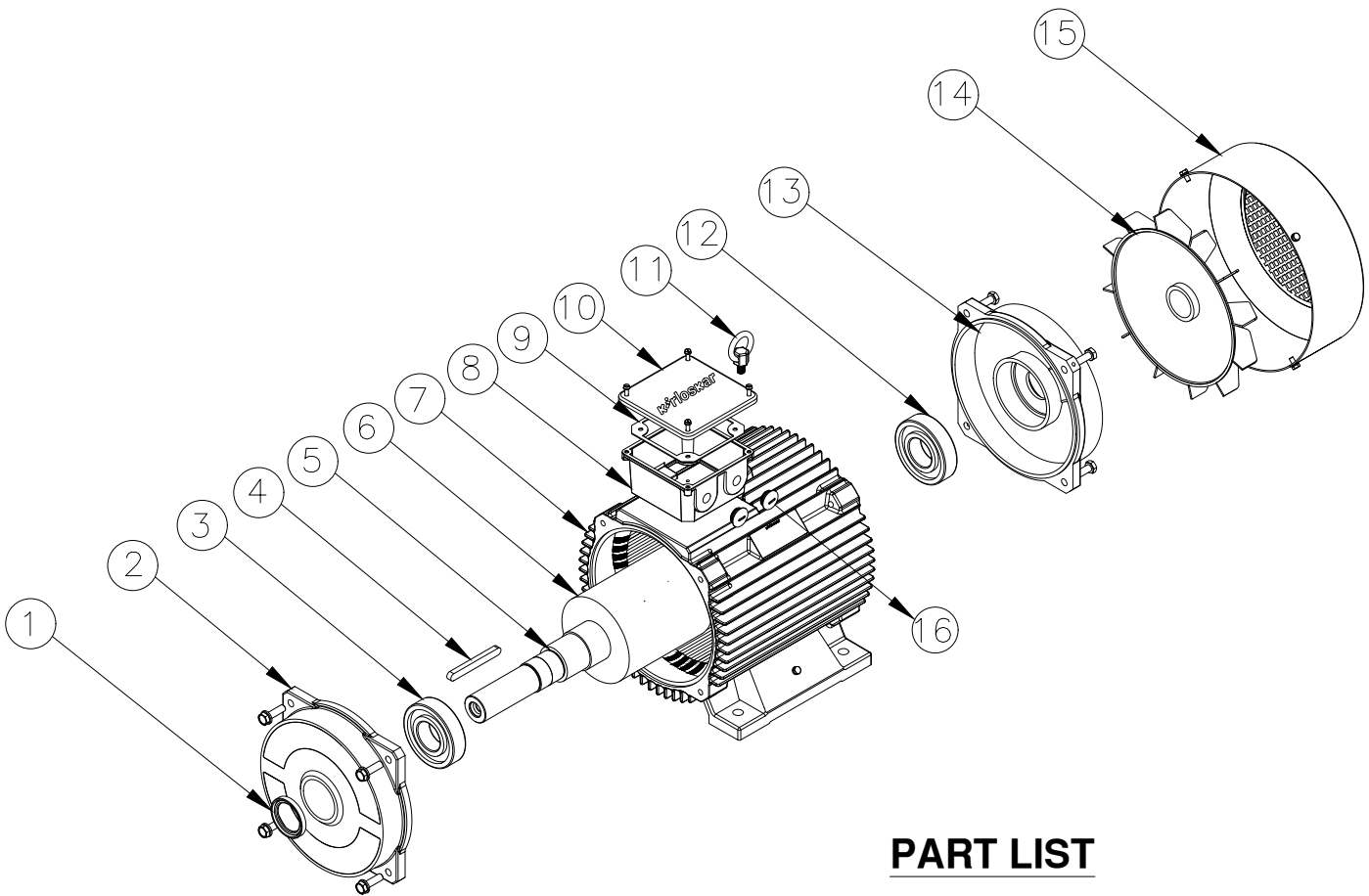
Terminal Box Arrangement: Frames: KM180 & KM200



NOTES:

- MOTORS IN FRAMES KM180-KM200 ARE PROVIDED WITH 3 NO. PTC 130 AS A STANDARD FEATURE.
- * TERMINAL BOX CAN BE ROTATED IN 360* IN STEPS OF 90*.
- * ONE EARTHING TERMINAL IS PROVIDED INSIDE THE MAIN TERMINAL BOX.
- * CABLE GLANDS ARE NOT IN KIRLOSKAR SCOPE OF SUPPLY.

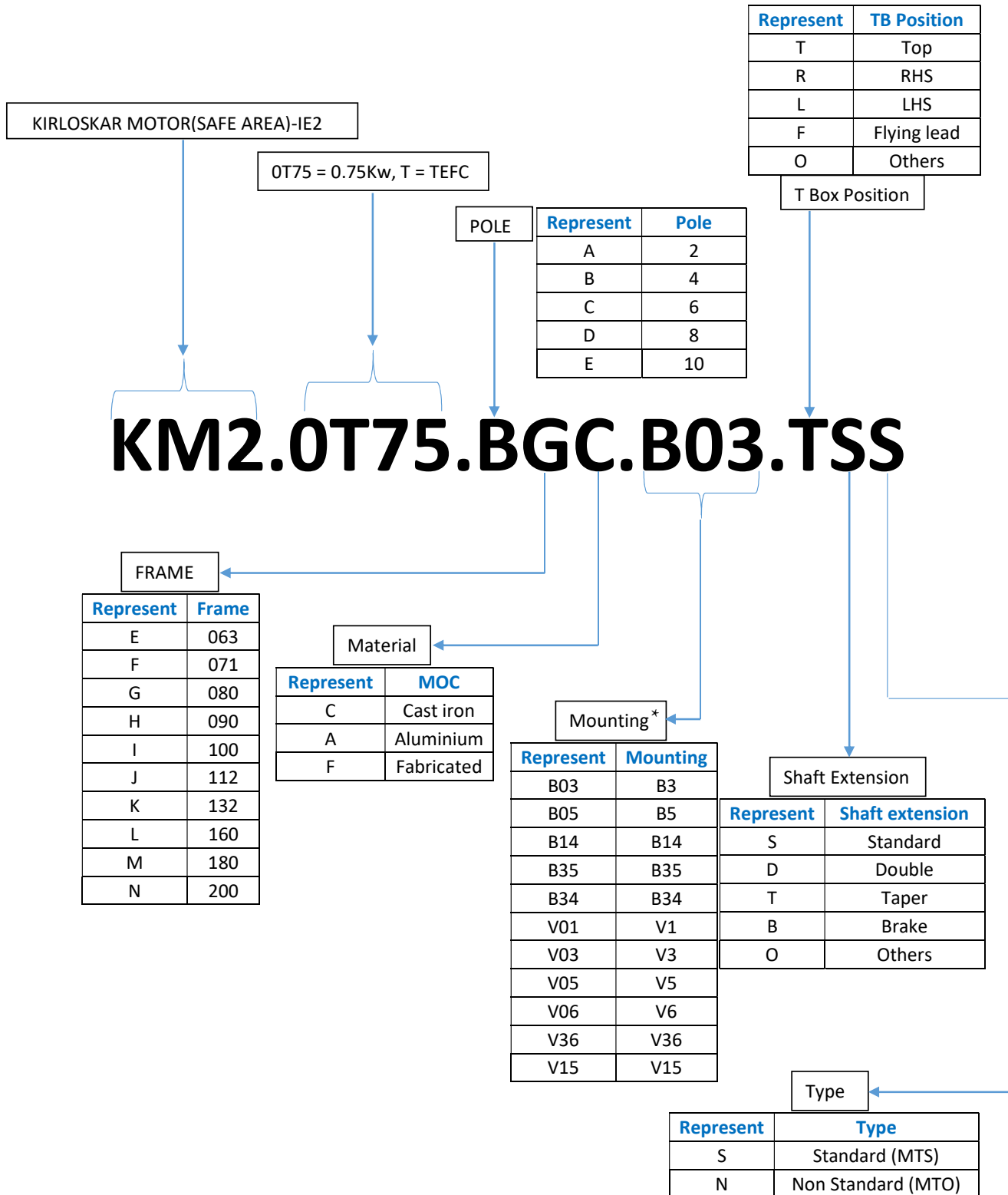
Exploded View:



PART LIST

S.No	Part Description	S.No	Part Description
1.	Oil Seal	9.	Rubber Gasket
2.	DE Endshield	10.	Terminal Box Cover
3.	DE Bearing	11.	Eye Bolt
4.	Key	12.	NDE Bearing
5.	Shaft	13.	NDE Endshield
6.	Rotor	14.	Cooling Fan
7.	Body	15.	Fan Cover
8.	Terminal Box	16.	Closing Plug

Product Code Guide:



*For other mounting arrangements, please get in touch with KOEL.

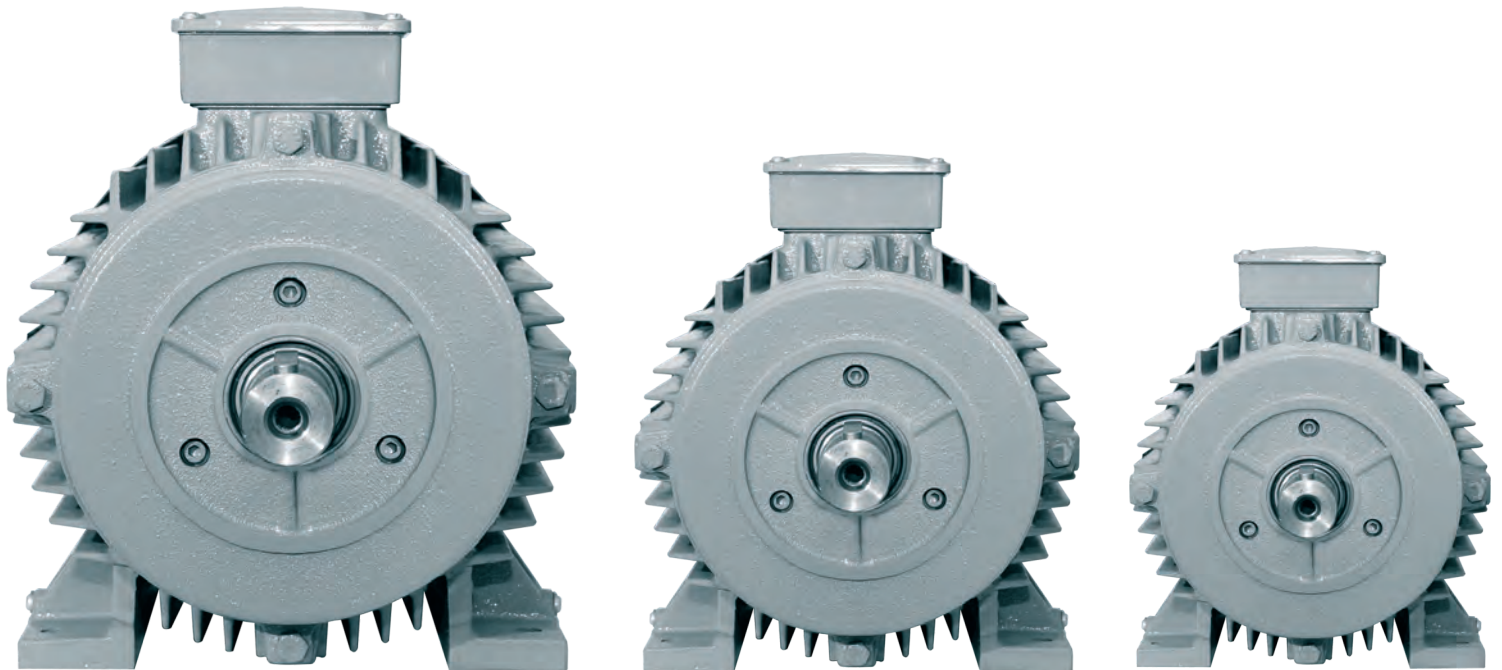


Note:

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kirloskar motors



For more information, please contact us at “motors.enquiry@kirloskar.com”

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