

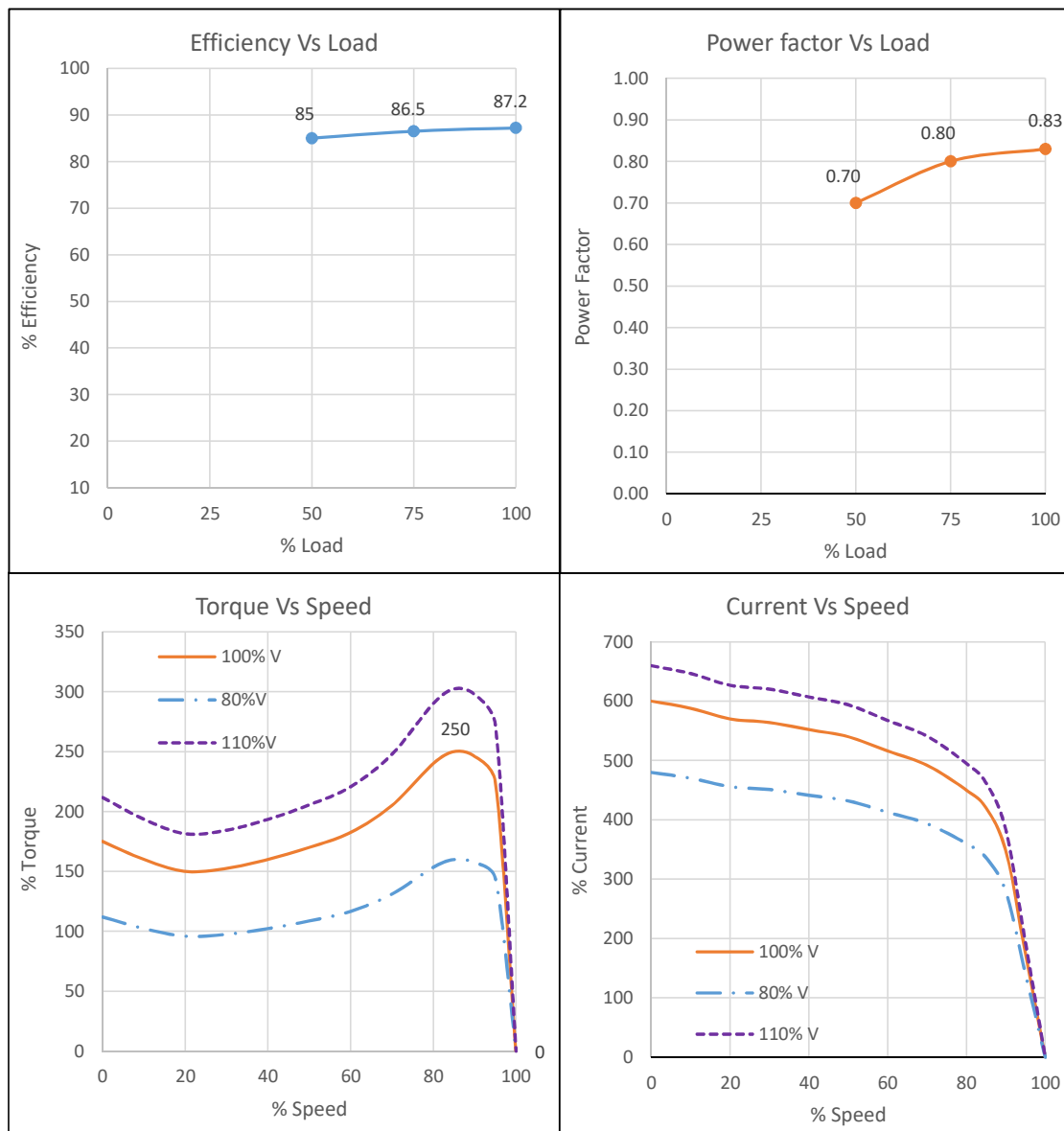
IE2

TECHNICAL DATASHEET **3 PHASE INDUCTION MOTOR**



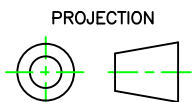
Sr No	Parameter	Unit	Data
Product Specifications			
1	Rated Output	kW	7.5
2	Number of Poles	No	6
3	Frame Designation		KM160M
4	Product Code		KM2.7T50.CLC.B35.TSS
5	Mounting		B35
Electrical			
6	Type of Duty		Continuous S1
7	Rated Voltage	V	415 $\pm$ 10%
8	Rated Frequency	Hz	50 $\pm$ 5%
9	Rated Speed	RPM	960
10	Rated Current	A	14
11	Method of Starting		Direct On Line
12	Starting Current (SCC)	% of FLA	600
13	Rated Torque	Kg-m	7.61
14	Starting Torque (STT)	% of FLT	175
15	Maximum Torque (POT)	% of FLT	250
16	Efficiency at 100% / 75% / 50% load	%	87.2 / 86.5/ 85
17	Power factor at 100% / 75% / 50% load		0.83 / 0.8 / 0.7
18	Thermal Withstand Time (Hot)	s	10
19	Thermal Withstand Time (Cold)	s	20
20	Thermal Time Constant (Stator)	min	40
21	Connection / Number of Terminals		Delta / 6
22	Permissible Starts/hour (Hot/Cold)	Nos	2/3
23	Insulation Class / Thermal Limit		F/B
24	Winding Treatment		VPI, Dual Coat Copper Wire
Mechanical			
25	Degree of Protection		IP55
26	Enclosure / MOC /Method of Cooling		TEFC / CI/ IC411
27	Bearing DE/NDE		6309ZZ/6309ZZ
28	Type of Coupling		Direct/Flexible
29	Noise Level		As per IS12065
30	Vibration Level		As per IS12075
31	Moment of Inertia GD ²	kg-m ²	0.41
32	Position of Terminal Box		TOP
33	Maximum Cable Size		2X3CX25 mm ²
34	Direction of Rotation		Bidirectional (Default: CW from DE)
35	Paint Shade		RAL 7046- Telegrey
36	Net weight	kg	116
37	Accessories		NA
Enviromental			
38	Ambient Temperature /Temperature Rise	°C	50 / 70 (By resistance method)
39	Altitude Above MSL	m	$\leq$ 1000
Notes: All performance data shall be subject to tolerances as per IS15999/IEC 60034. Applicable Standards:IS 12615-2018, IS 15999-1			
Customer		PO No./ Enq. No	
		Date	
Checked	BMD	22/10/2022	
Approved	SSN	22/10/2022	Document No: KM2-001 Rev.0
KIRLOSKAR OIL ENGINES LTD. ELECTRIC MOTORS			

PERFORMANCE CURVE



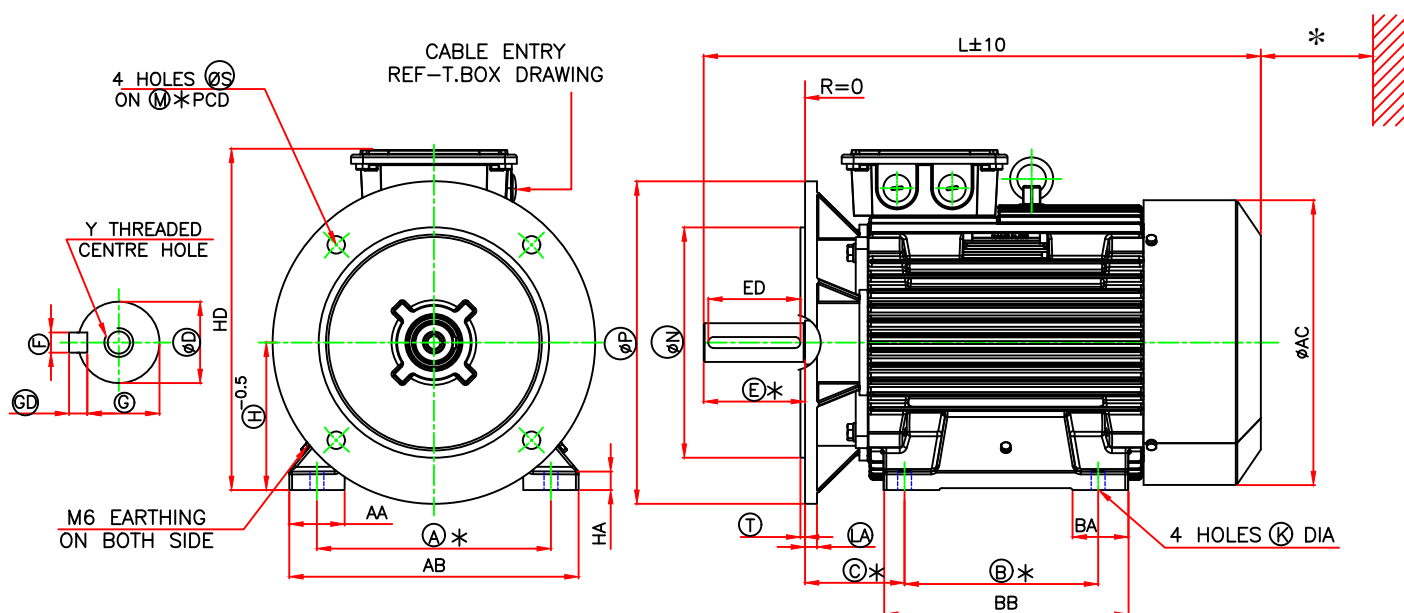
kW	7.5	Customer	
Pole	6	PO No / Enq. No	
Frame	KM160M	Date	
Mounting	B35	Product Code	KM2.7T50.CLC.B35.TSS
Checked	BMD	22/10/2022	
Approved	SSN	22/10/2022	Document No KM2-002 Rev. 0

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ELECTRIC MOTORS



GENERAL ARRANGEMENT DRAWING FOR TEFC 3 PHASE INDUCTION MOTOR

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FRAME	FOOT FIXING									FLANGE FIXING					
	A	B	C	H TOL.	AA	AB	BA	BB	K TOL.	MTol	NTol	P	S	T	LA
KM160M	254	210	108	160/159.5	60	314	60	266	15/15.5	300	250.016/249.987	350	19	5	13

D END SHAFT EXTENSION AND KEY							OVER ALL			
D TOL.	E	ED	F TOL.	GD TOL.	G	Y	AC	L	HD	HA
42.018/42.002	110	100	12/11.957	8.0/7.9	37.0/36.9	M16X32	309	600	382	20

kW	PRODUCT CODE	PRODUCT CODE	PRODUCT CODE
	2 POLE	4 POLE	6 POLE
9.3	KM2.9T30.ALC.B35.TSS	KM2.9T30.BLC.B35.TSS	--
7.5	--	--	KM2.7T50.CLC.B35.TSS

NOTES:

- ONE EARTHING TERMINAL IS PROVIDED INSIDE MAIN TERMINAL BOX.
- * 100mm MINIMUM DISTANCE TO BE MAINTAINED FOR EFFICIENT COOLING OF THE MOTOR.
- * TOLERANCES ON MANDATORY DIMENSIONS ARE AS PER IS:1231/IS:2223/IEC:60072

RINGED DIMENSIONS ARE AS PER IS:1231/IS:2223/IEC:60072-1

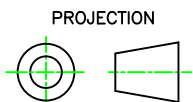
ALL DIMENSIONS ARE IN mm,

	NAME	DATE	kW	REFER TABLE	FRAME	KM160M
DRAWN	SGS	18/08/2022	POLE	REFER TABLE	MOUNTING	B35 (HORIZONTAL FOOT CUM FLANGE)
CHECKED	SGS	18/08/2022	PRODUCT CODE	REFER TABLE	CUSTOMER	
APPROVED	SSN	18/08/2022	MAX. CABLE SIZE	2RX3CX25MM ²	PO NO	
			PROJECT		CLIENT	

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ELECTRIC MOTORS

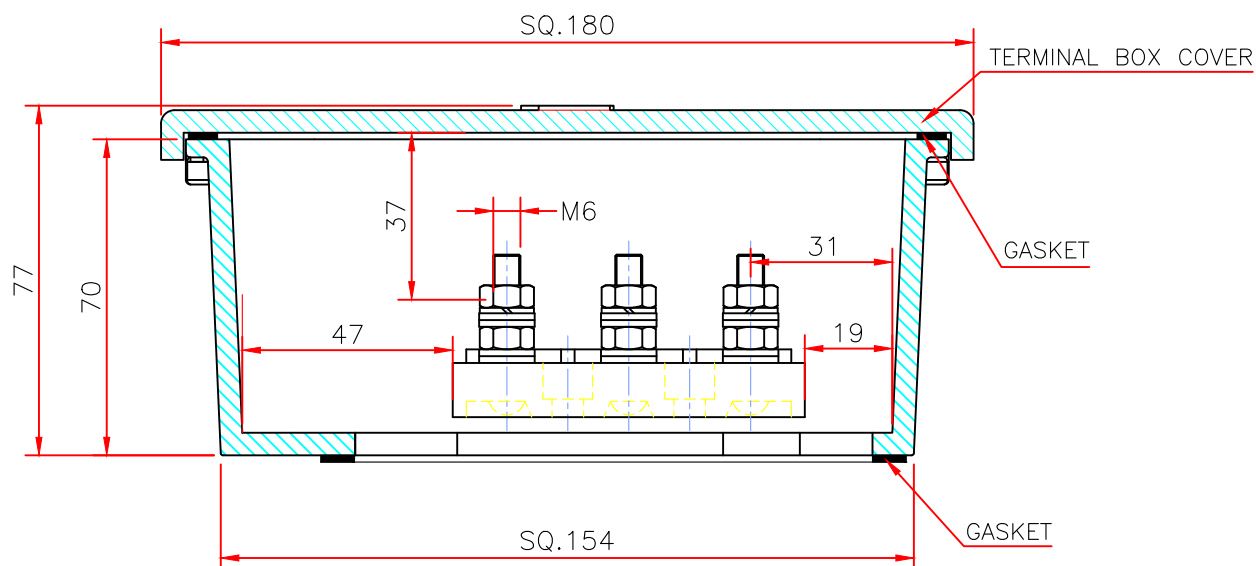
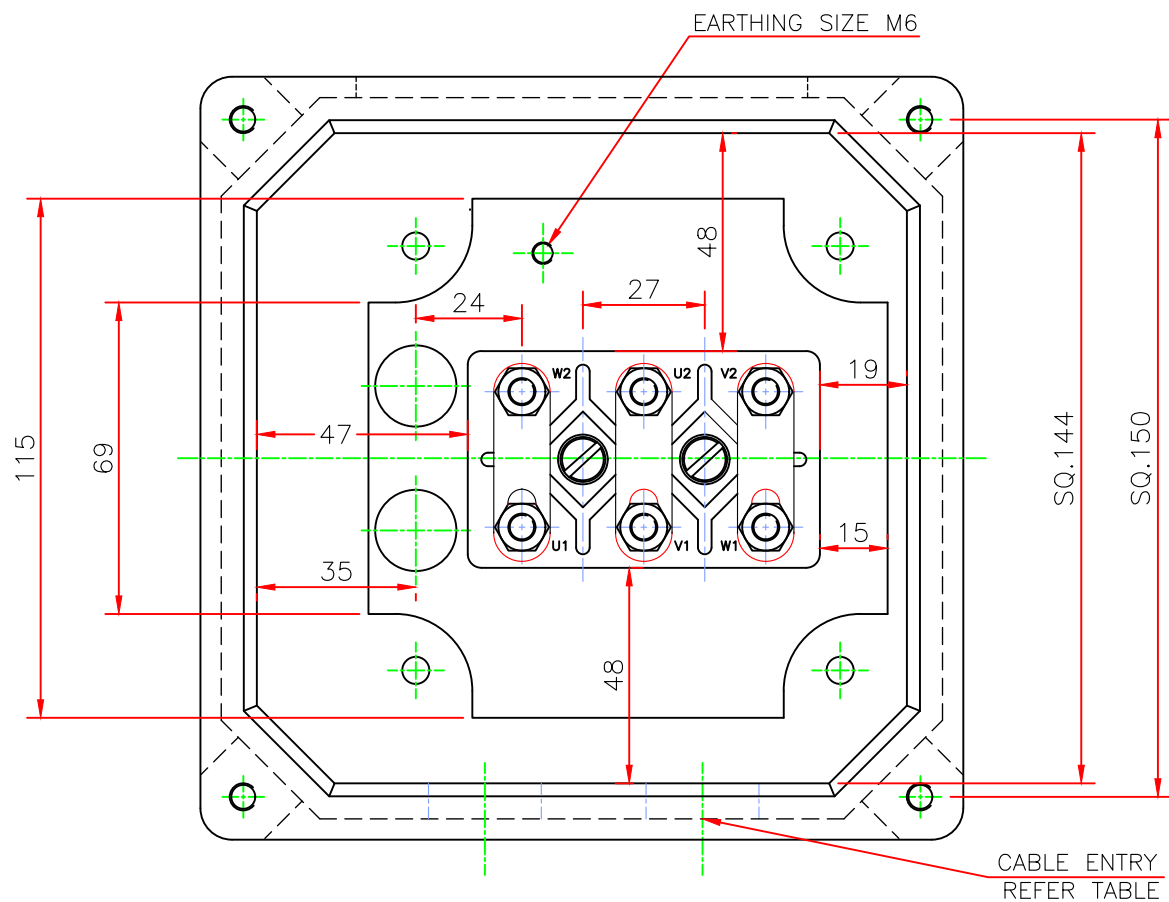
DO NOT SCALE
FORMAT NO.:KM-GA-2021 R0

DRAWING NO
KM160MB35TSR0



TERMINAL ARRANGEMENT DRAWING

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ALL DIMENSIONS ARE IN mm

	NAME	DATE	kW		FRAME	KM160M/L
DRAWN	SGS	23/12/2021	POLE		CUSTOMER	
CHECKED	SGS	23/12/2021	PRODUCT CODE		PO NO	
APPROVED	SSN	23/12/2021	MAX. CABLE SIZE	2RX3CX25MM ²	CLIENT	
			CABLE ENTRY	M25X1.5P-2NOS.	PROJECT	
KIRLOSKAR OIL ENGINES LTD. ELECTRIC MOTORS				DO NOT SCALE FORMAT NO.:KM-TB-2021 R0	DRAWING NO KM160TBR1	