

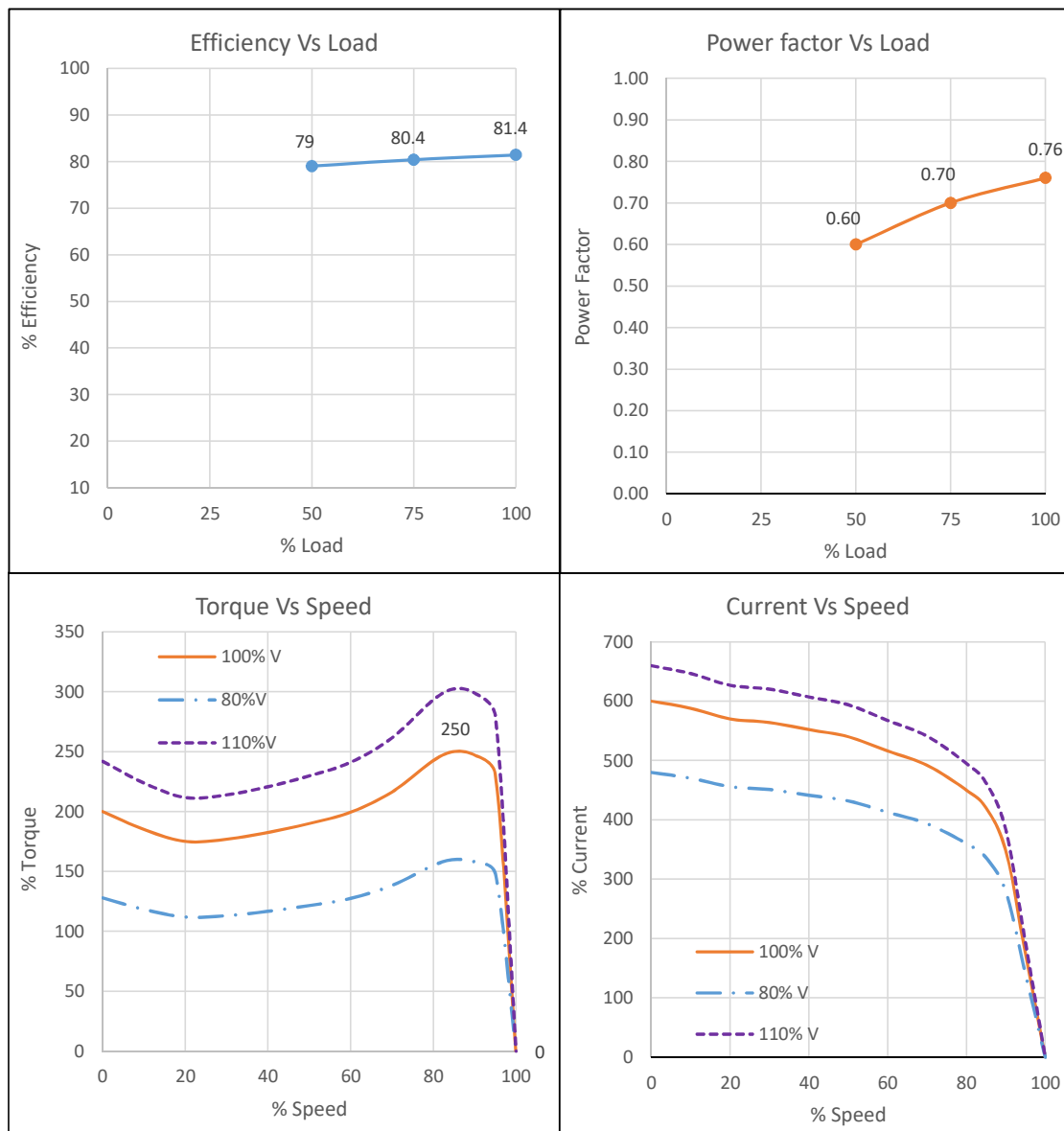
IE2

TECHNICAL DATASHEET 3 PHASE INDUCTION MOTOR



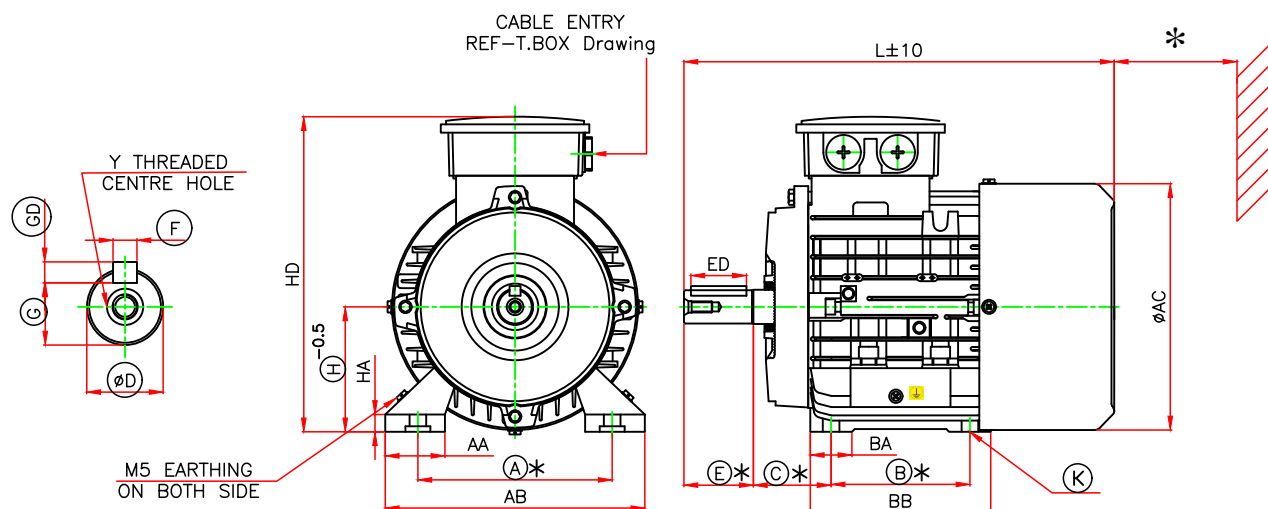
Sr No	Parameter	Unit	Data
Product Specifications			
1	Rated Output	kW	1.1
2	Number of Poles	No	4
3	Frame Designation		KM90S
4	Product Code		KM2.1T10.BHA.B03.TSS
5	Mounting		B3
Electrical			
6	Type of Duty		Continuous S1
7	Rated Voltage	V	415 ±10%
8	Rated Frequency	Hz	50 ±5%
9	Rated Speed	RPM	1420
10	Rated Current	A	2.50
11	Method of Starting		Direct On Line
12	Starting Current (SCC)	% of FLA	600
13	Rated Torque	Kg-m	0.75
14	Starting Torque (STT)	% of FLT	200
15	Maximum Torque (POT)	% of FLT	250
16	Efficiency at 100% / 75% / 50% load	%	81.4 / 80.4/ 79
17	Power factor at 100% / 75% / 50% load		0.76 / 0.7 / 0.6
18	Thermal Withstand Time (Hot)	s	6
19	Thermal Withstand Time (Cold)	s	12
20	Thermal Time Constant (Stator)	min	30
21	Connection / Number of Terminals		Star / 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 / AL/ IC411
27	Bearing DE/NDE		6205ZZ/6205ZZ
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	0.0110
32	Position of Terminal Box		TOP
33	Maximum Cable Size		1X3CX4 mm ²
34	Direction of Rotation		Bidirectional (Default: CW from DE)
35	Paint Shade		RAL 7046- Telegrey
36	Net weight	kg	17.00
37	Accessories		NA
Enviromental			
38	Ambient Temperature /Temperature Rise	°C	50 / 70 (By resistance method)
39	Altitude Above MSL	m	≤ 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	27/10/2022	
Approved	SSN	27/10/2022	Document No: KM2-001 Rev.0
KIRLOSKAR OIL ENGINES LTD.			
ELECTRIC MOTORS			

PERFORMANCE CURVE



kW	1.1	Customer	
Pole	4	PO No / Enq. No	
Frame	KM90S	Date	
Mounting	B3	Product Code	KM2.1T10.BHA.B03.TSS
Checked	BMD	27/10/2022	
Approved	SSN	27/10/2022	Document No KM2-002 Rev. 0

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FRAME	FOOT FIXING									OVER ALL			
	A	B	C	H TOL.	AA	AB	BA	BB	K	AC	L	HD	HA
KM90S	140	100	56	90/89.5	43	187	30	130	18X12	178	310	227	12.5

D END SHAFT EXTENSION AND KEY						
D TOL.	E	ED	F TOL.	GD TOL.	G	Y
24.009/23.996	50	40	8/7.964	7.0/6.9	20.0/19.9	M8X19

kW	PRODUCT CODE	PRODUCT CODE	PRODUCT CODE	PRODUCT CODE
	2 POLE	4 POLE	6 POLE	8 POLE
0.37	--	--	--	KM2.0T37.DHA.B03.TSS
0.75	--	--	KM2.0T75.CHA.B03.TSS	--
1.1	--	KM2.1T10.BHA.B03.TSS	--	--
1.5	KM2.1T50.AHA.B03.TSS	--	--	--

NOTES:

1. ONE EARTHING TERMINAL IS PROVIDED INSIDE MAIN TERMINAL BOX.
2. * 80mm MINIMUM DISTANCE TO BE MAINTAINED FOR EFFICIENT COOLING OF THE MOTOR.
3. * TOLERANCES ON MANDATORY DIMENSIONS ARE AS PER IS:1231/IEC:60072

RINGED DIMENSIONS ARE AS PER IS:1231/IEC:60072

ALL DIMENSIONS ARE IN mm,

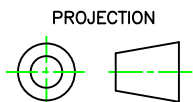
	NAME	DATE	KW	REFER TABLE	FRAME	KM90S
DRAWN	KSK	21/10/2022	POLE	REFER TABLE	MOUNTING	B3 (HORIZONTAL FOOT)
CHECKED	SGS	21/10/2022	PRODUCT CODE	REFER TABLE	CUSTOMER	
APPROVED	SSN	21/10/2022	MAX. CABLE SIZE	1RX3CX4MM ²	PO NO	
			PROJECT		CLIENT	

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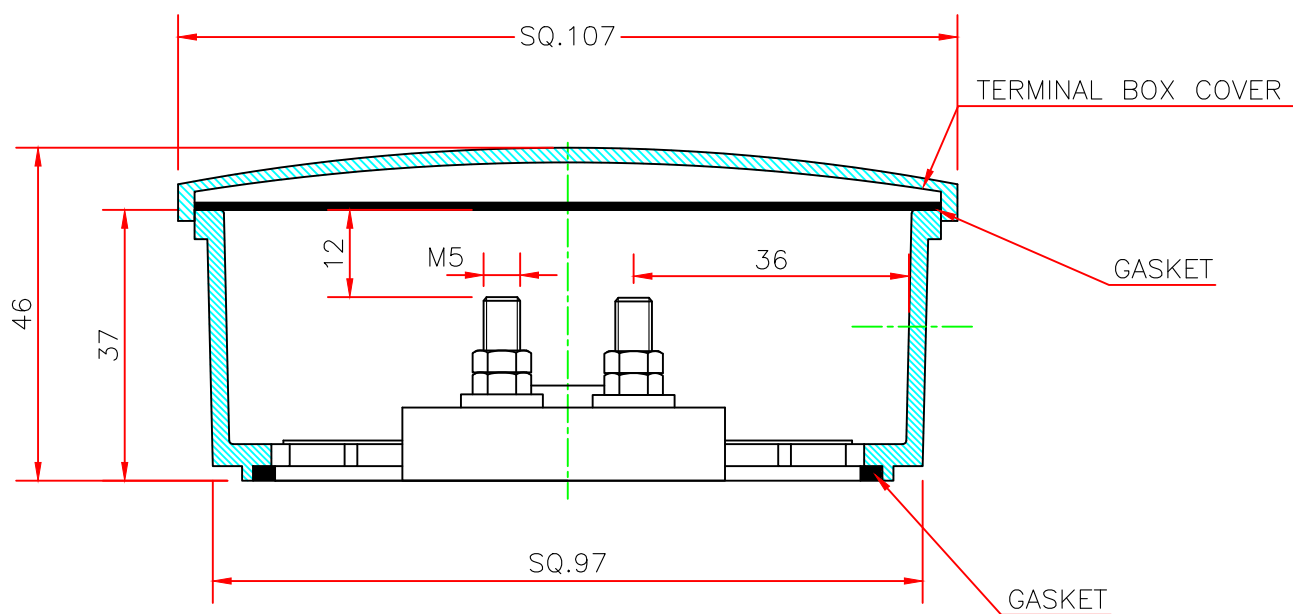
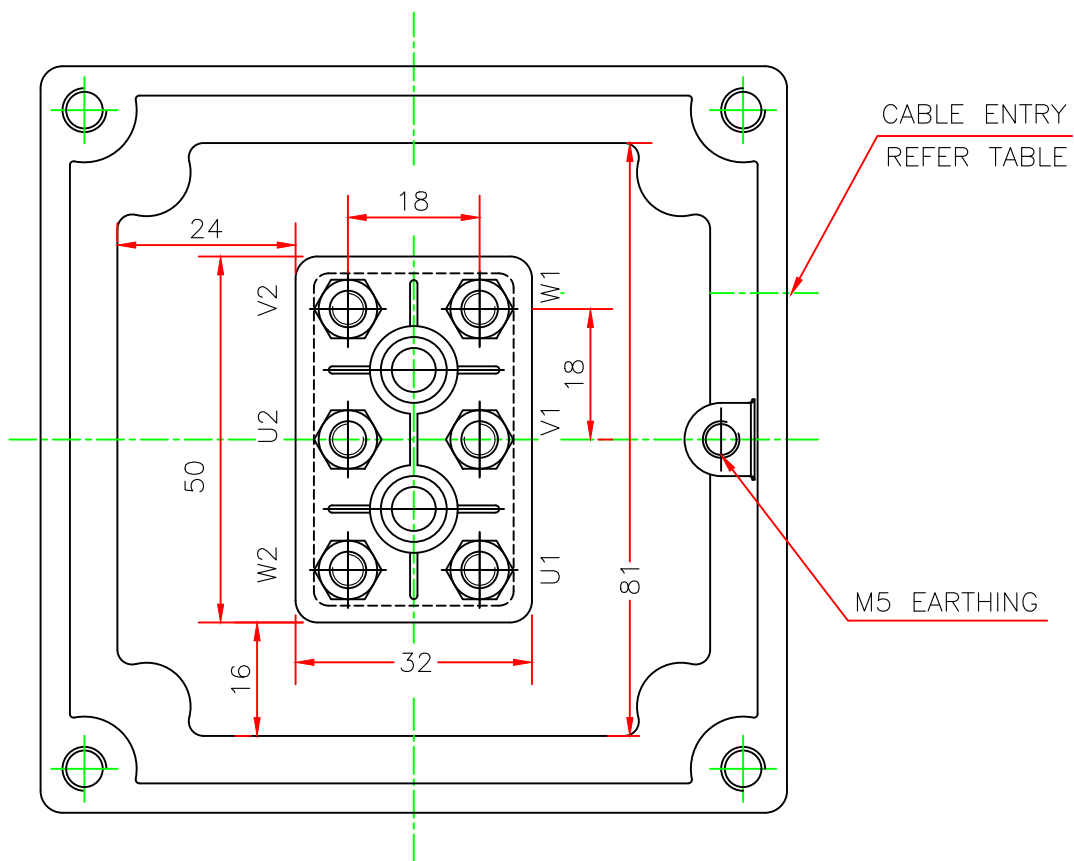
DO NOT SCALE

FORMAT NO.:KM-GA-2021 RO

DRAWING NO
KM90SB3TSALR0



TERMINAL ARRANGEMENT DRAWING



ALL DIMENSIONS ARE IN mm

	NAME	DATE	kW		FRAME	KM90S/L
DRAWN	SGS	24/12/2021	POLE		CUSTOMER	
CHECKED	SGS	24/12/2021	PRODUCT CODE		PO NO	
APPROVED	SSN	24/12/2021	MAX. CABLE SIZE	1RX3CX4MM ²	CLIENT	
			CABLE ENTRY	M20X1.5P-1NO.	PROJECT	
KIRLOSKAR OIL ENGINES LTD. ELECTRIC MOTORS				DO NOT SCALE FORMAT NO.:KM-TB-2021 R0	DRAWING NO KM90TBR1	