

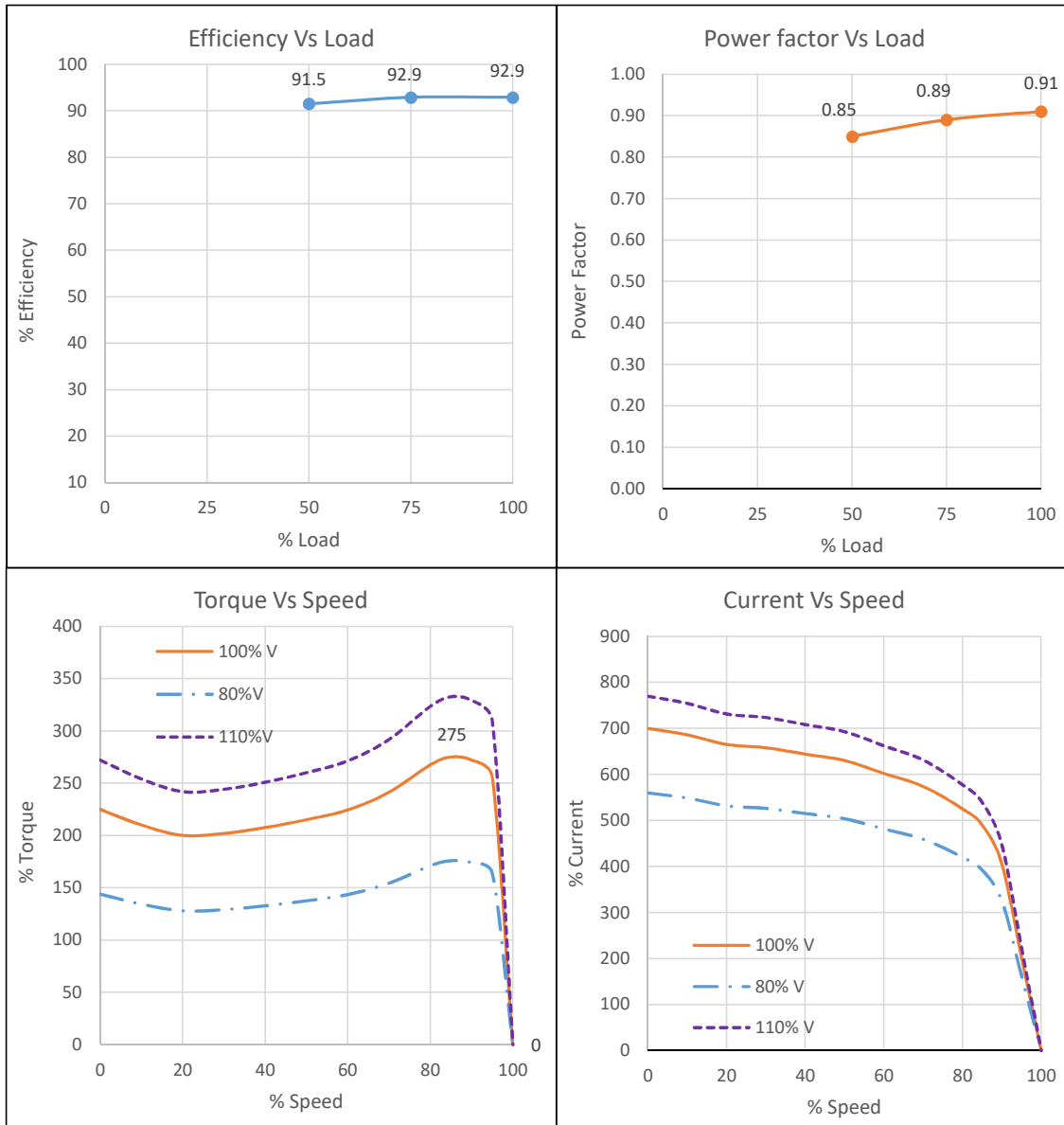
IE2

TECHNICAL DATASHEET **3 PHASE INDUCTION MOTOR**

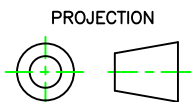


Sr No	Parameter	Unit	Data
Product Specifications			
1	Rated Output	kW	45
2	Number of Poles	No	2
3	Frame Designation		KM225M
4	Product Code		KM2.45T0.AQC.B03.TSS
5	Mounting		B3
Electrical			
6	Type of Duty		Continuous S1
7	Rated Voltage	V	415 $\pm$ 10%
8	Rated Frequency	Hz	50 $\pm$ 5%
9	Rated Speed	RPM	2950
10	Rated Current	A	74
11	Method of Starting		Direct On Line
12	Starting Current (SCC)	% of FLA	700
13	Rated Torque	Kg-m	14.86
14	Starting Torque (STT)	% of FLT	225
15	Maximum Torque (POT)	% of FLT	275
16	Efficiency at 100% / 75% / 50% load	%	92.9 / 92.9 / 91.5
17	Power factor at 100% / 75% / 50% load		0.91 / 0.89 / 0.85
18	Thermal Withstand Time (Hot)	s	12
19	Thermal Withstand Time (Cold)	s	24
20	Thermal Time Constant (Stator)	min	60
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		6313ZZ C3/6312ZZ C3
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	1.39
32	Position of Terminal Box		TOP
33	Maximum Cable Size		2X3CX120 mm ²
34	Direction of Rotation		Bidirectional (Default: CW from DE)
35	Paint Shade		RAL 7046- Telegrey
36	Net weight	kg	320
37	Accessories		PTC 130 - 3 Nos (1 No / phase)
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	13-12-2022	
Approved	SSN	13-12-2022	Document No: KM2-001 Rev.0
KIRLOSKAR OIL ENGINES LTD. ELECTRIC MOTORS			

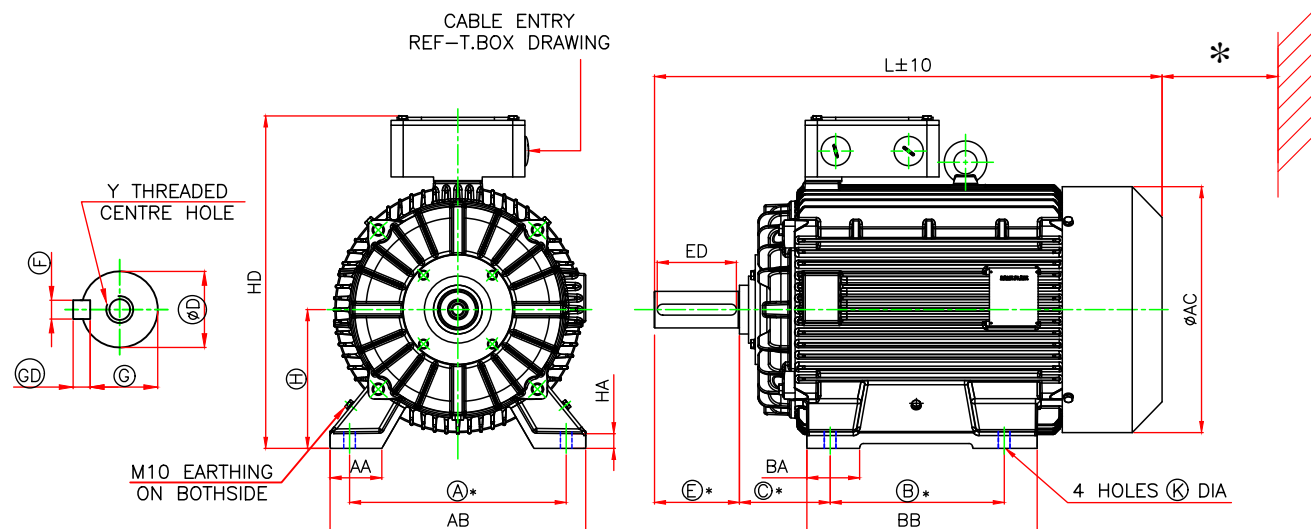
PERFORMANCE CURVE



kW	45	Customer	
Pole	2	PO No / Enq. No	
Frame	KM225M	Date	
Mounting	B3	Product Code	KM2.45T0.AQC.B03.TSS
Checked	BMD	13-12-2022	
Approved	SSN	13-12-2022	Document No KM2-002 Rev. 0
KIRLOSKAR OIL ENGINES LTD.			
ELECTRIC MOTORS			



GENERAL ARRANGEMENT DRAWING FOR TEFC 3 PHASE INDUCTION MOTOR



FRAME	FOOT FIXING									OVER ALL			
	A	B	C	H TOL.	AA	AB	BA	BB	K TOL.	AC	L	HD	HA
KM225M	356	311	149	225/224.5	87	420	106	377	19/19.5	405	820	550	24

D END SHAFT EXTENSION AND KEY						
D TOL.	E	ED	F TOL.	GD TOL.	G	Y
55.030/55.011	110	100	16/15.957	10.0/9.9	49.0/48.9	M20X40

kW	PRODUCT CODE
	2 POLE
45	KM2.45T0.AQC.B03.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/IEC:60072

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

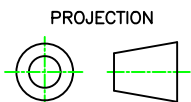
ALL DIMENSIONS ARE IN mm,

	NAME	DATE	kW	REFER TABLE	FRAME	KM225M
DRAWN	SGS	05/01/2023	POLE	REFER TABLE	MOUNTING	B3 (HORIZONTAL FOOT)
CHECKED	SGS	05/01/2023	PRODUCT CODE	REFER TABLE	CUSTOMER	
APPROVED	SSN	05/01/2023	MAX. CABLE SIZE	2RX3CX120MM ²	PO NO	
			PROJECT		CLIENT	

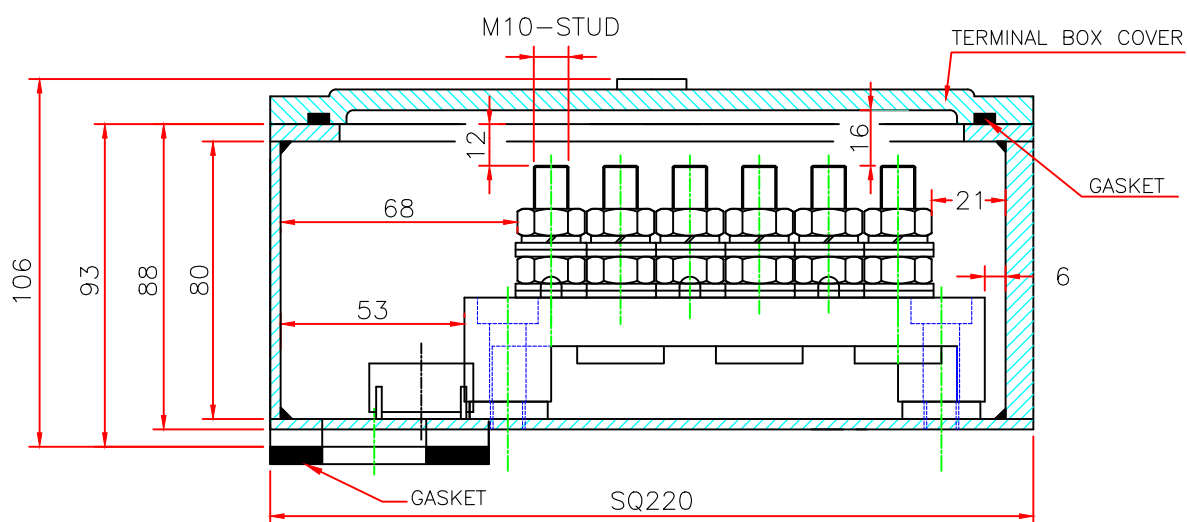
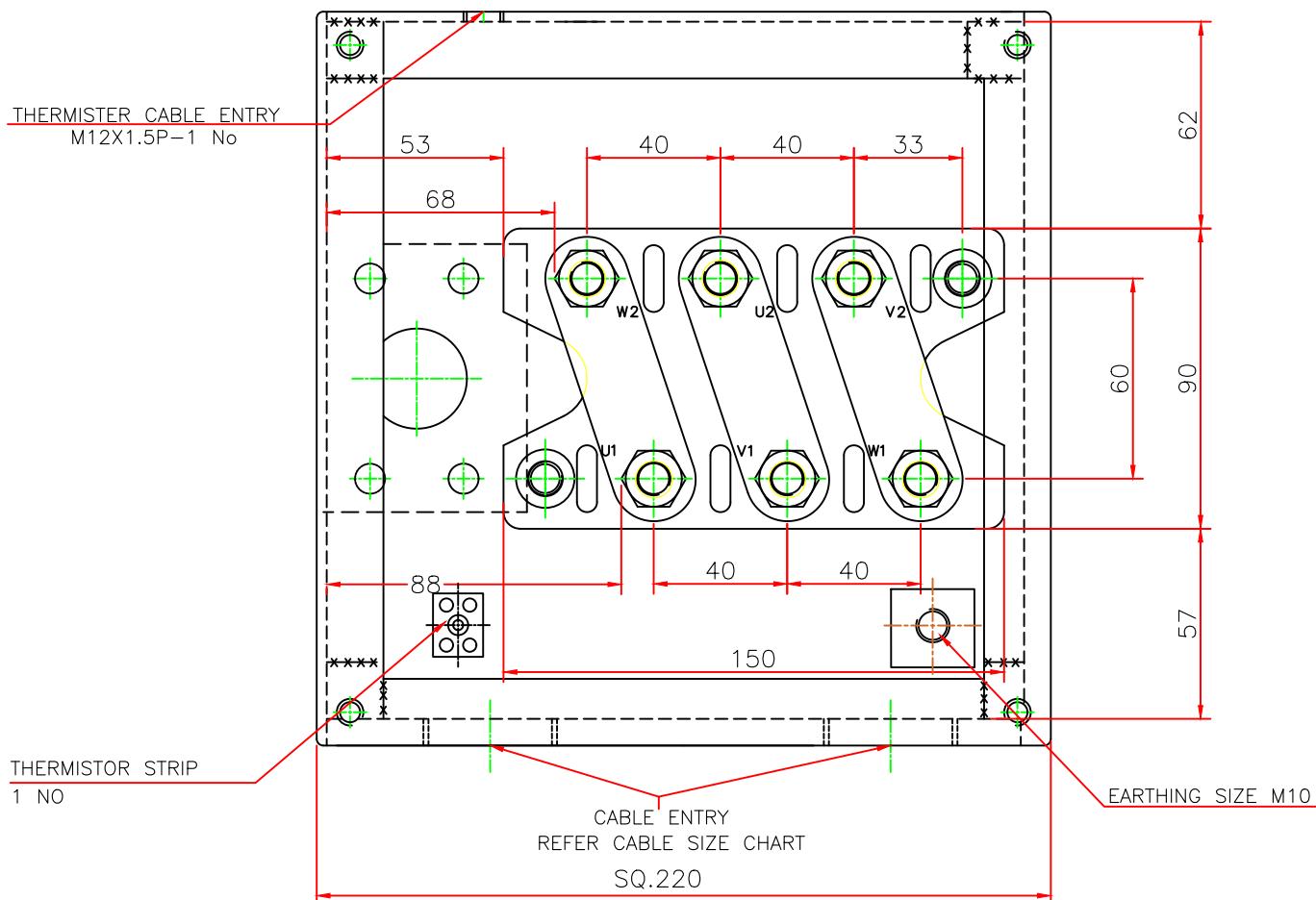
KIRLOSKAR OIL ENGINES LTD.
ELECTRIC MOTORS

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

DRAWING NO
KM225MB3TS_2PR0



TERMINAL ARRANGEMENT DRAWING



ALL DIMENSIONS ARE IN mm

	NAME	DATE	kW		FRAME	KM225/KM250
DRAWN	SGS	05/01/2023	POLE		CUSTOMER	
CHECKED	SGS	05/01/2023	PRODUCT CODE		PO NO	
APPROVED	SSN	05/01/2023	MAX. CABLE SIZE	2RX3CX120MM ²	CLIENT	
			CABLE ENTRY	M50X1.5P-2NOS.	PROJECT	
KIRLOSKAR OIL ENGINES LTD. ELECTRIC MOTORS				DO NOT SCALE FORMAT NO.:KM-TB-2021 R0	DRAWING NO KM225TBR0	