

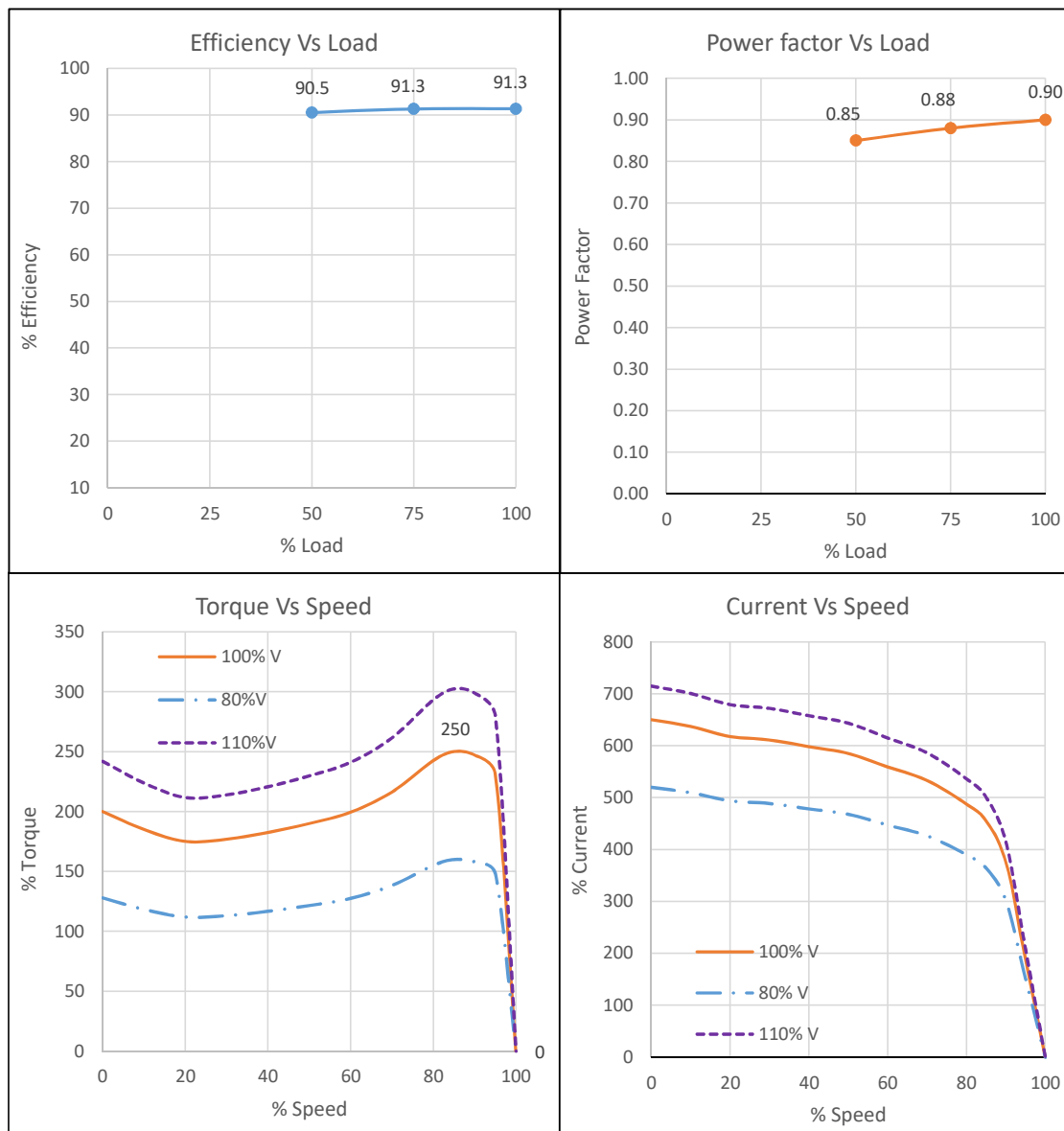
IE2

TECHNICAL DATASHEET 3 PHASE INDUCTION MOTOR - FIRE FIGHTING



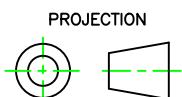
Sr No	Parameter	Unit	Data
Product Specifications			
1	Rated Output	kW	22
2	Number of Poles	No	2
3	Frame Designation		KM160L
4	Product Code		KM2.22T0.ALC.B03.TSN
5	Mounting		B3
Electrical			
6	Type of Duty		Continuous S1
7	Rated Voltage	V	415 ±10%
8	Rated Frequency	Hz	50 ±5%
9	Rated Speed	RPM	2915
10	Rated Current	A	37
11	Method of Starting		Direct On Line
12	Starting Current (SCC)	% of FLA	650
13	Rated Torque	Kg-m	7.35
14	Starting Torque (STT)	% of FLT	200
15	Maximum Torque (POT)	% of FLT	250
16	Efficiency at 100% / 75% / 50% load	%	91.3 / 91.3/ 90.5
17	Power factor at 100% / 75% / 50% load		0.9 / 0.88 / 0.85
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/F
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/6209ZZ
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	0.231
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 3001
36	Net weight	kg	146
37	Accessories		NA
Enviromental			
38	Ambient Temperature /Temperature Rise	°C	50 / 95 (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	18-05-2023	
Approved	SSN	18-05-2023	Document No: KM2-001 Rev.0
KIRLOSKAR OIL ENGINES LTD.			
ELECTRIC MOTORS			

PERFORMANCE CURVE

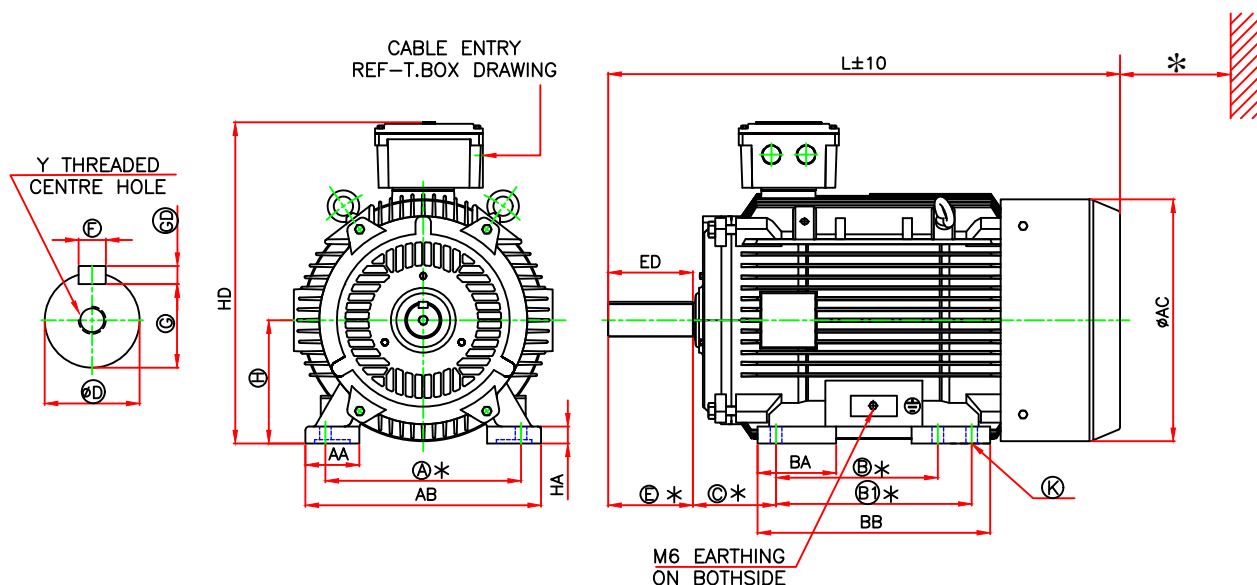


kW	22	Customer	
Pole	2	PO No / Enq. No	
Frame	KM160L	Date	
Mounting	B3	Product Code	KM2.22T0.ALC.B03.TSN
Checked	BMD	18-05-2023	
Approved	SSN	18-05-2023	Document No KM2-002 Rev. 0

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GENERAL ARRANGEMENT DRAWING FOR TEFC 3 PHASE INDUCTION MOTOR



FRAME	FOOT FIXING										OVER ALL			
	A	B	B1	C	H TOL.	AA	AB	BA	BB	K TOL.	AC	L	HD	HA
KM160L	254	210	254	108	160/159.5	70	306	102	302	15/15.5	314	665	417	22

D END SHAFT EXTENSION AND KEY						
D TOL.	E	ED	F TOL.	GD TOL.	G	Y
42.018/42.002	110	110	12/11.957	8.0/7.9	37.0/36.8	M16X45

kW	PRODUCT CODE
	2 POLE
18.5	KM2.18T5.ABC.B03.TSN
22	KM2.22T0.ALC.B03.TSN

NOTES:

- * 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

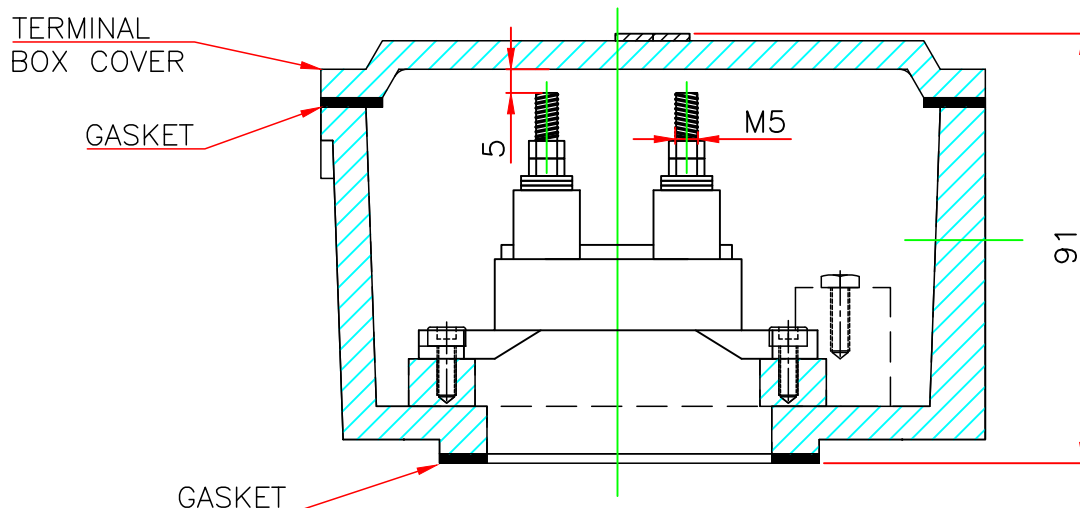
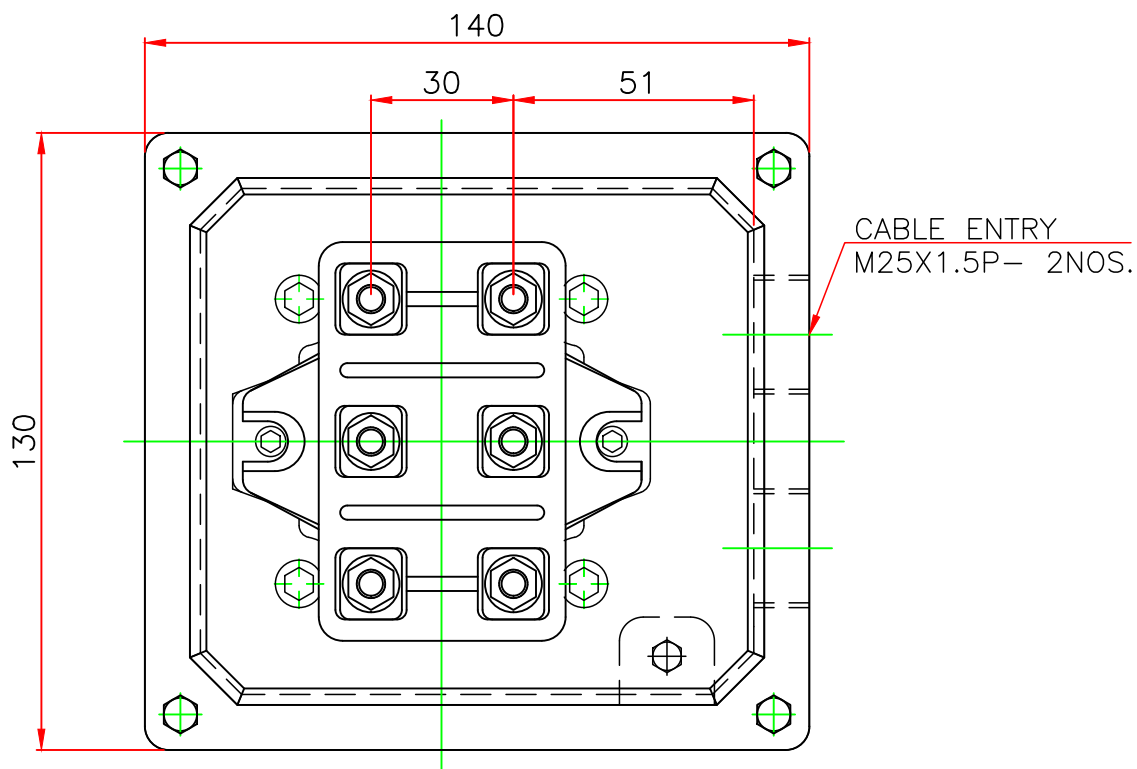
ALL DIMENSIONS ARE IN mm,

	NAME	DATE	kW	REFER TABLE	FRAME	KM160L
DRAWN	KSK	29/05/2023	POLE	REFER TABLE	MOUNTING	B3 (HORIZONTAL FOOT)
CHECKED	SGS	29/05/2023	PRODUCT CODE	REFER TABLE	CUSTOMER	
APPROVED	SSN	29/05/2023	MAX. CABLE SIZE	2RX3CX25MM ²	PO NO	
			PROJECT		CLIENT	

KIRLOSKAR OIL ENGINES LTD.
ELECTRIC MOTORS

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

DRAWING NO
KM160LB3TSFFR0



ALL DIMENSIONS ARE IN mm

	NAME	DATE	kW		FRAME	KM160M/L
DRAWN	KSK	29/05/2023	POLE		CUSTOMER	
CHECKED	SGS	29/05/2023	PRODUCT CODE		PO NO	
APPROVED	SSN	29/05/2023	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 KM160TBFFR0