

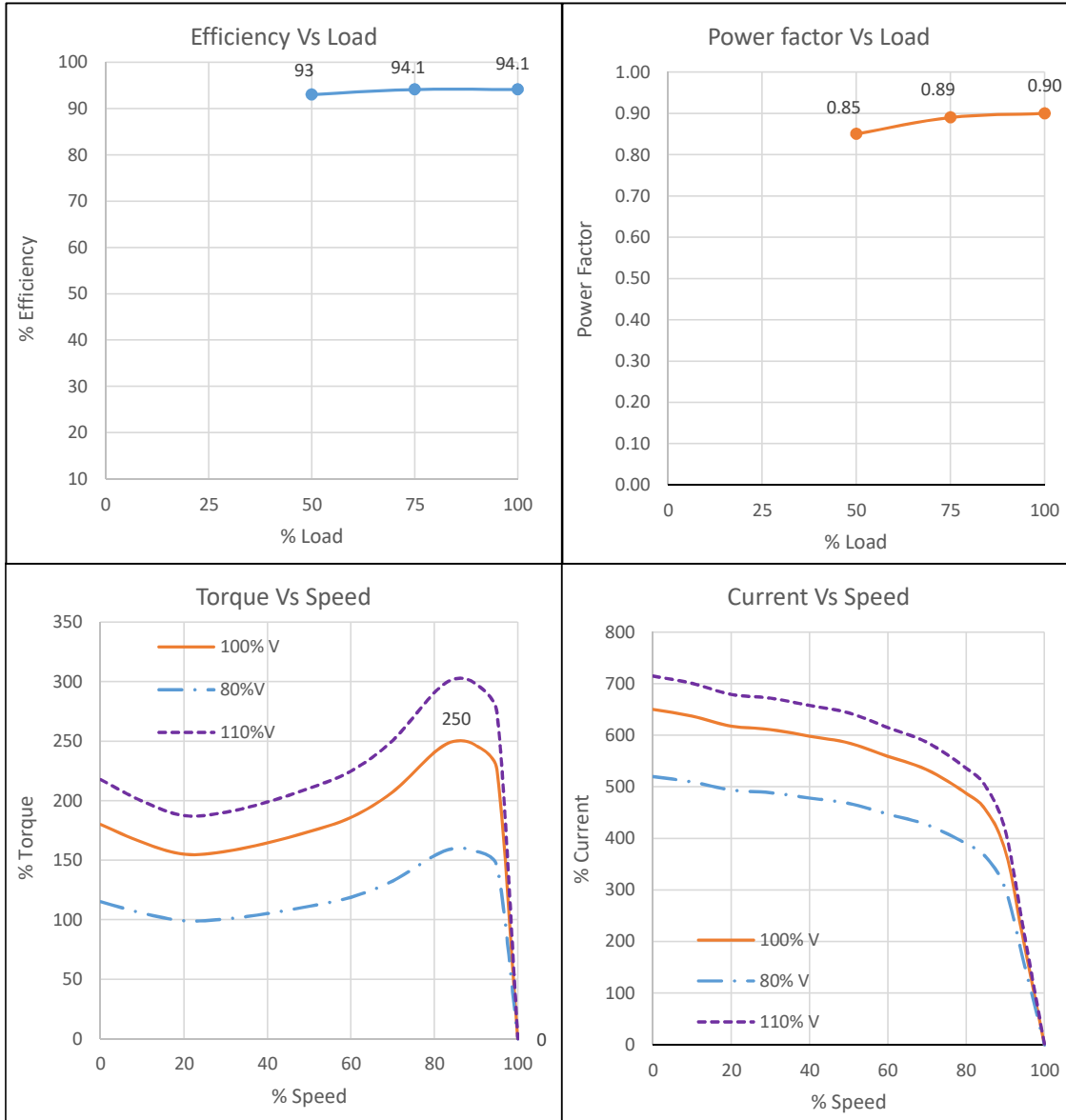
IE2

TECHNICAL DATASHEET
3 PHASE INDUCTION MOTOR - FIRE FIGHTING



Sr No	Parameter	Unit	Data
Product Specifications			
1	Rated Output	kW	90
2	Number of Poles	No	2
3	Frame Designation		KM250M
4	Product Code		KM2.90T0.ARC.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	2960
10	Rated Current	A	148
11	Method of Starting		Direct On Line
12	Starting Current (SCC)	% of FLA	650
13	Rated Torque	Kg-m	29.61
14	Starting Torque (STT)	% of FLT	180
15	Maximum Torque (POT)	% of FLT	250
16	Efficiency at 100% / 75% / 50% load	%	94.1 / 94.1/ 93
17	Power factor at 100% / 75% / 50% load		0.9 / 0.89 / 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		6315 C4/6315 C4
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	2.459
32	Position of Terminal Box		RHS from DE
33	Maximum Cable Size		2X3CX120 mm ²
34	Direction of Rotation		Bidirectional (Default: CW from DE)
35	Paint Shade		RAL 3001
36	Net weight	kg	470
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	31-05-2023	
Approved	SSN	31-05-2023	Document No: KM2-001 Rev.0
KIRLOSKAR OIL ENGINES LTD. ELECTRIC MOTORS			

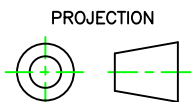
PERFORMANCE CURVE



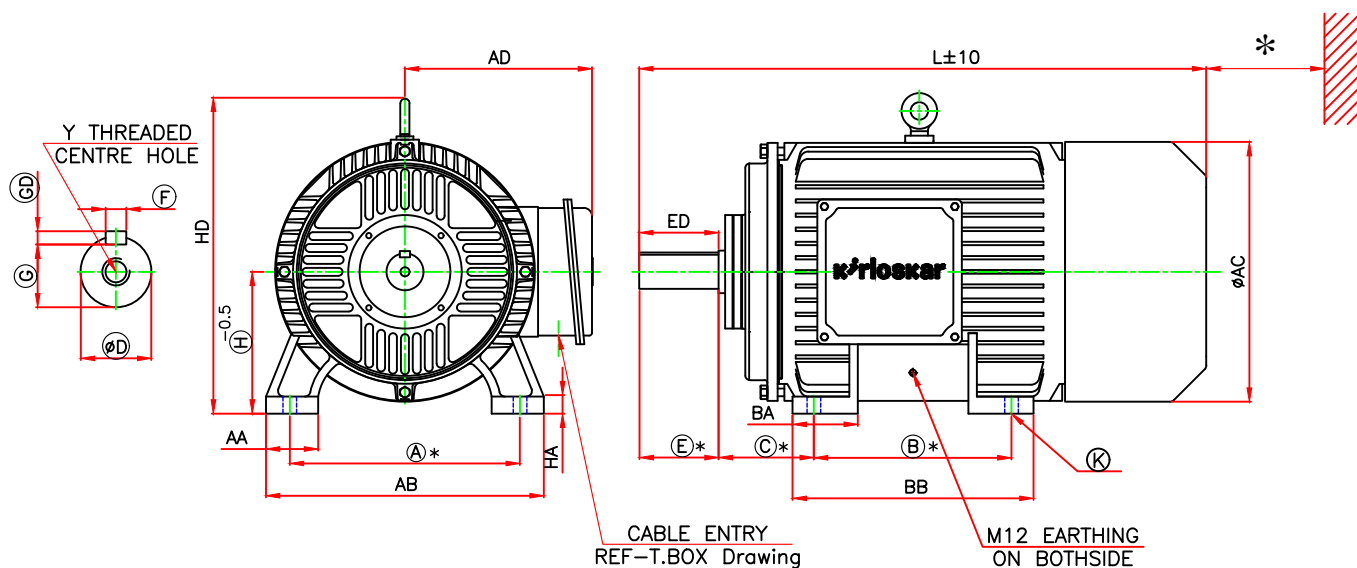
kW	90	Customer	
Pole	2	PO No / Enq. No	
Frame	KM250M	Date	
Mounting	B3	Product Code	KM2.90T0.ARC.B03.TSN
Checked	BMD	31-05-2023	
Approved	SSN	31-05-2023	Document No KM2-002 Rev. 0

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	AD
KM250M	406	349	168	250/249.5	95	490	115	430	24/24.5	460	1000	555	30	330

D END SHAFT EXTENSION AND KEY							
D TOL.	E	ED	F TOL.	GD TOL.	G	Y	
60.030/60.011	140	140	18/17.957	11/10.9	53/52.8	M20X53	

kW	PRODUCT CODE
	2 POLE
75	KM2.75T0.ARC.B03.TSN
90	KM2.90T0.ARC.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

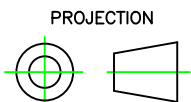
ALL DIMENSIONS ARE IN mm,

	NAME	DATE	kW	REFER TABLE	FRAME	KM250M
DRAWN	KSK	14/10/2022	POLE	REFER TABLE	MOUNTING	B3 (HORIZONTAL FOOT)
CHECKED	SGS	14/10/2022	PRODUCT CODE	REFER TABLE	CUSTOMER	
APPROVED	SSN	14/10/2022	MAX. CABLE SIZE	2RX3CX120MM ²	PO NO	
			PROJECT		CLIENT	

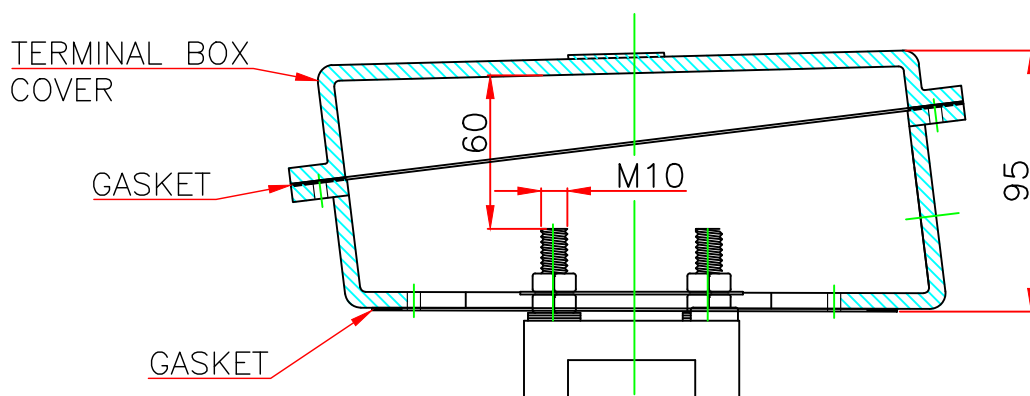
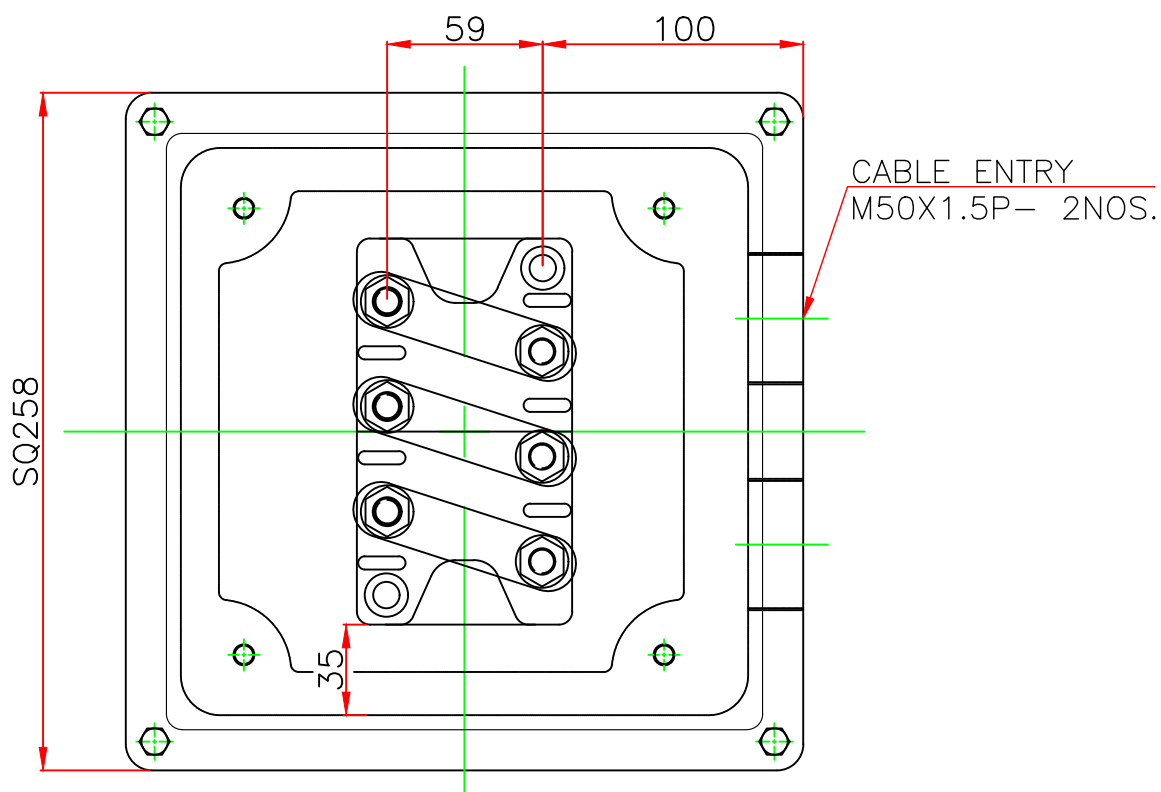
KIRLOSKAR OIL ENGINES LTD.
ELECTRIC MOTORS

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

DRAWING NO
KM250MB3TSFFR0



TERMINAL ARRANGEMENT DRAWING



ALL DIMENSIONS ARE IN mm

	NAME	DATE	kW		FRAME	KM250M
DRAWN	KSK	14/10/2022	POLE		CUSTOMER	
CHECKED	SGS	14/10/2022	PRODUCT CODE		PO NO	
APPROVED	SSN	14/10/2022	MAX. CABLE SIZE	2RX3CX120MM ²	CLIENT	
			CABLE ENTRY	M50X1.5P-2NOS.	PROJECT	
KIRLOSKAR OIL ENGINES LTD.				DO NOT SCALE	DRAWING NO	
ELECTRIC MOTORS				FORMAT NO.:KM-TB-2021 R0	KM250MTBFFR0	