

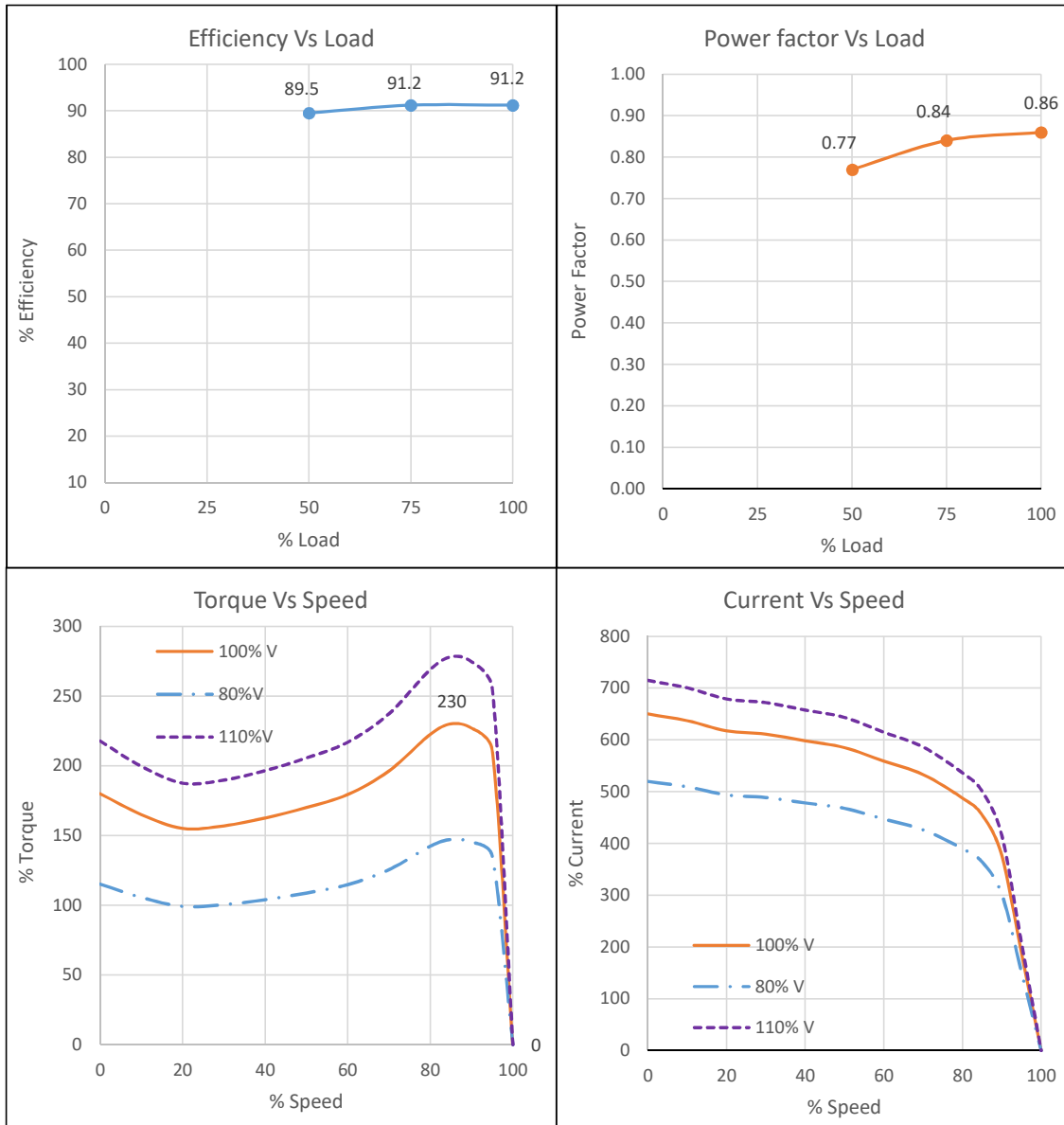
IE2

TECHNICAL DATASHEET **3 PHASE INDUCTION MOTOR**

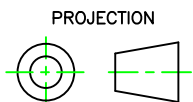


Sr No	Parameter	Unit	Data
Product Specifications			
1	Rated Output	kW	18.5
2	Number of Poles	No	4
3	Frame Designation		KM180M
4	Product Code		KM2.18T5.BMC.B03.TSS
5	Mounting		B3
Electrical			
6	Type of Duty		Continuous S1
7	Rated Voltage	V	415 $\pm$ 10%
8	Rated Frequency	Hz	50 $\pm$ 5%
9	Rated Speed	RPM	1475
10	Rated Current	A	33
11	Method of Starting		Direct On Line
12	Starting Current (SCC)	% of FLA	650
13	Rated Torque	Kg-m	12.22
14	Starting Torque (STT)	% of FLT	180
15	Maximum Torque (POT)	% of FLT	230
16	Efficiency at 100% / 75% / 50% load	%	91.2 / 91.2 / 89.5
17	Power factor at 100% / 75% / 50% load		0.86 / 0.84 / 0.77
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		6310ZZ/6310ZZ
28	Type of Coupling		Direct/Flexible
29	Noise Level		As per IS12065
30	Vibration Level		As per IS12075
31	GD ²	kg-m ²	0.95
32	Position of Terminal Box		TOP
33	Maximum Cable Size		2X3CX50 mm ²
34	Direction of Rotation		Bidirectional (Default: CW from DE)
35	Paint Shade		RAL 7046- Telegrey
36	Net weight	kg	185
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	06-06-2022	
Approved	SSN	06-06-2022	Document No: KM2-001 Rev.0
KIRLOSKAR OIL ENGINES LTD. ELECTRIC MOTORS			

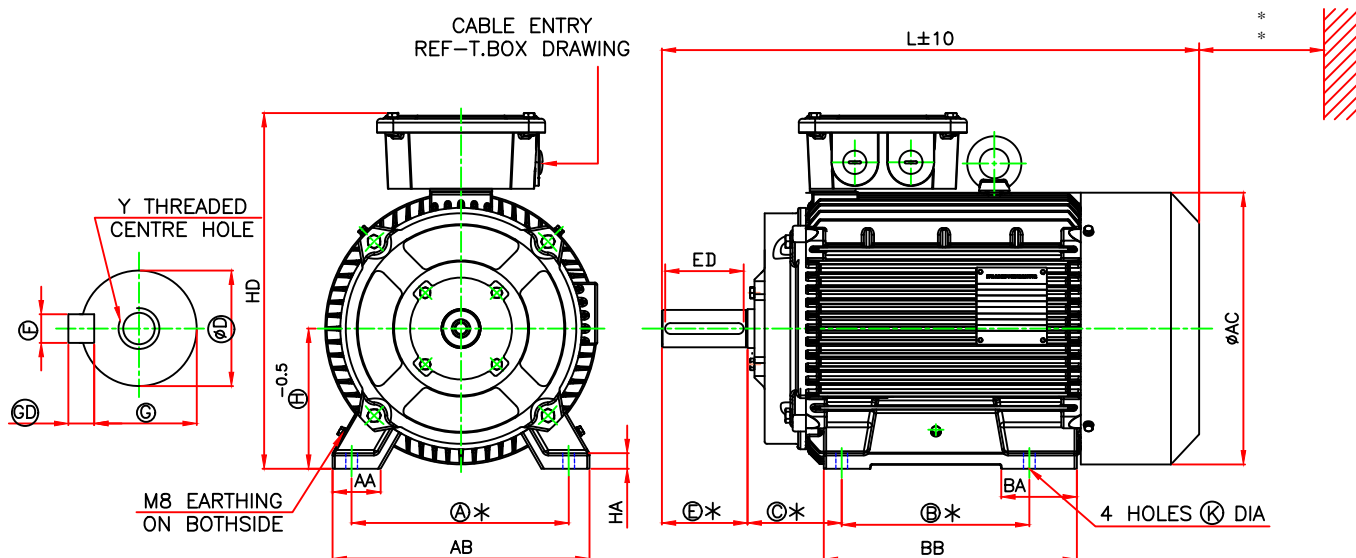
PERFORMANCE CURVE



kW	18.5	Customer	
Pole	4	PO No / Enq. No	
Frame	KM180M	Date	
Mounting	B3	Product Code	KM2.18T5.BMC.B03.TSS
Checked	BMD	06-06-2022	
Approved	SSN	06-06-2022	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
KM180M	279	241	121	180/179.5	62	330	97	325	15/15.5	349	690	457	20

D END SHAFT EXTENSION AND KEY						
D TOL.	E	ED	F TOL.	GD TOL.	G	Y
48.018/48.002	110	100	14/13.957	9.0/8.9	42.5/42.4	M16X32

kW	PRODUCT CODE	PRODUCT CODE
	2 POLE	4 POLE
22	KM2.22T0.AMC.B03.TSS	--
18.5	--	KM2.18T5.BMC.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

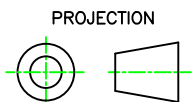
ALL DIMENSIONS ARE IN mm,

	NAME	DATE	kW	REFER TABLE	FRAME	KM180M
DRAWN	SGS	23/12/2021	POLE	REFER TABLE	MOUNTING	B3 (HORIZONTAL FOOT)
CHECKED	SGS	23/12/2021	PRODUCT CODE	REFER TABLE	CUSTOMER	
APPROVED	SSN	23/12/2021	MAX. CABLE SIZE	2RX3CX50MM ²	PO NO	
			PROJECT		CLIENT	

KIRLOSKAR OIL ENGINES LTD.
ELECTRIC MOTORS

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

DRAWING NO
KM180MB3TSR1

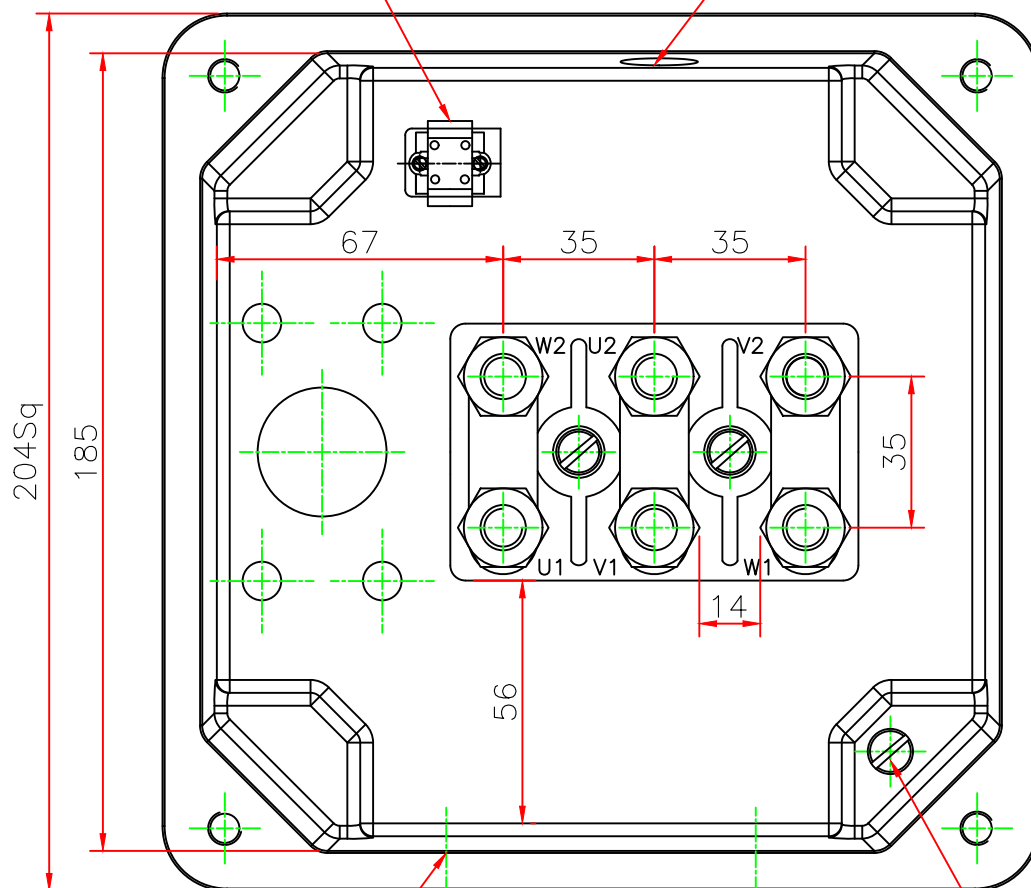


TERMINAL ARRANGEMENT DRAWING

kirloskar
motors

2 PO, 5A
Terminal WAGO Connector

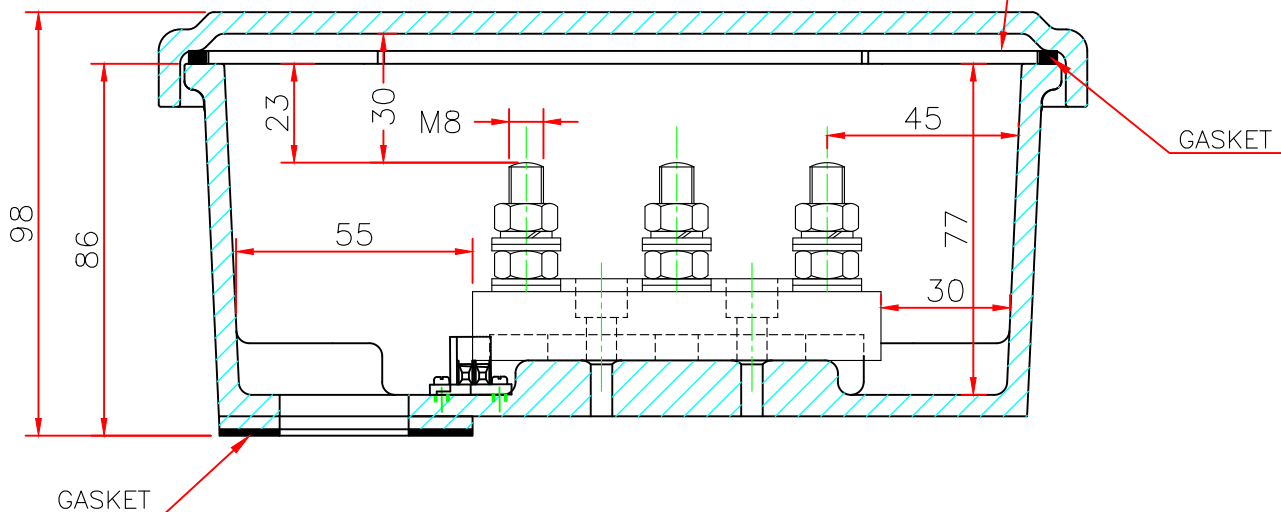
THERMISTOR CABLE
M12X1.5P-1No



CABLE ENTRY
REFER TABLE

EARTHING SIZE M8

TERMINAL BOX COVER



GASKET

ALL DIMENSIONS ARE IN mm

	NAME	DATE	kW		FRAME	KM180M/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	2RX3CX50MM ²	CLIENT	
			CABLE ENTRY	M40X1.5P-2NOS.	PROJECT	
KIRLOSKAR OIL ENGINES LTD. ELECTRIC MOTORS				DO NOT SCALE FORMAT NO.:KM-TB-2021 R0	DRAWING NO KM180TBR1	