

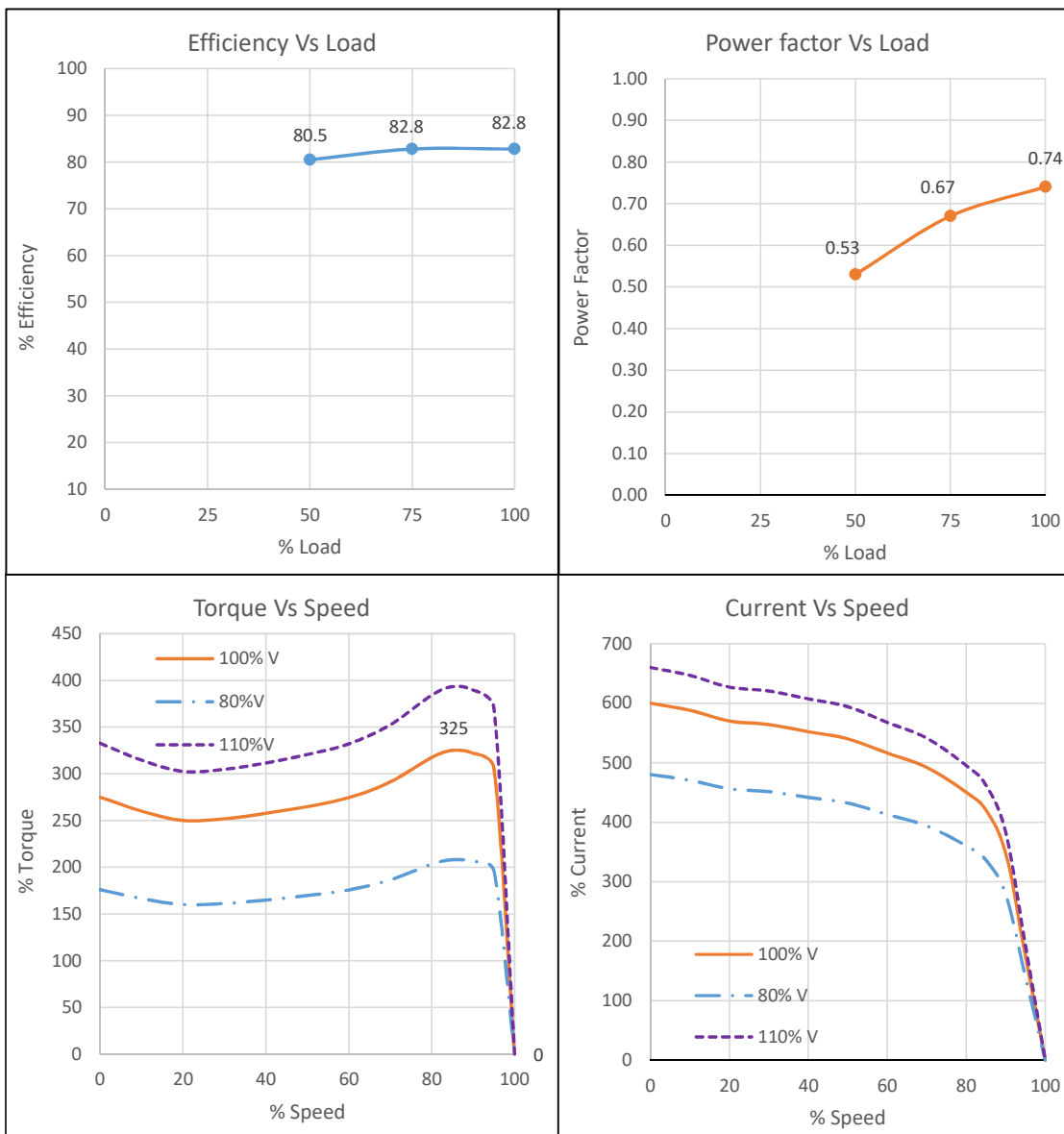
IE2

TECHNICAL DATASHEET **3 PHASE INDUCTION MOTOR**



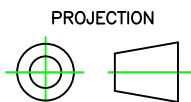
Sr No	Parameter	Unit	Data
Product Specifications			
1	Rated Output	kW	1.5
2	Number of Poles	No	4
3	Frame Designation		KM90L
4	Product Code		KM2.1T50.BHA.B35.TSS
5	Mounting		B35
Electrical			
6	Type of Duty		Continuous S1
7	Rated Voltage	V	415 $\pm$ 10%
8	Rated Frequency	Hz	50 $\pm$ 5%
9	Rated Speed	RPM	1420
10	Rated Current	A	3.45
11	Method of Starting		Direct On Line
12	Starting Current (SCC)	% of FLA	600
13	Rated Torque	Kg-m	1.03
14	Starting Torque (STT)	% of FLT	275
15	Maximum Torque (POT)	% of FLT	325
16	Efficiency at 100% / 75% / 50% load	%	82.8 / 82.8/ 80.5
17	Power factor at 100% / 75% / 50% load		0.74 / 0.67 / 0.53
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	0.0135
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	18.50
37	Accessories		NA
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	21-06-2023	
Approved	SSN	21-06-2023	Document No: KM2-001 Rev.0
KIRLOSKAR OIL ENGINES LTD. ELECTRIC MOTORS			

PERFORMANCE CURVE

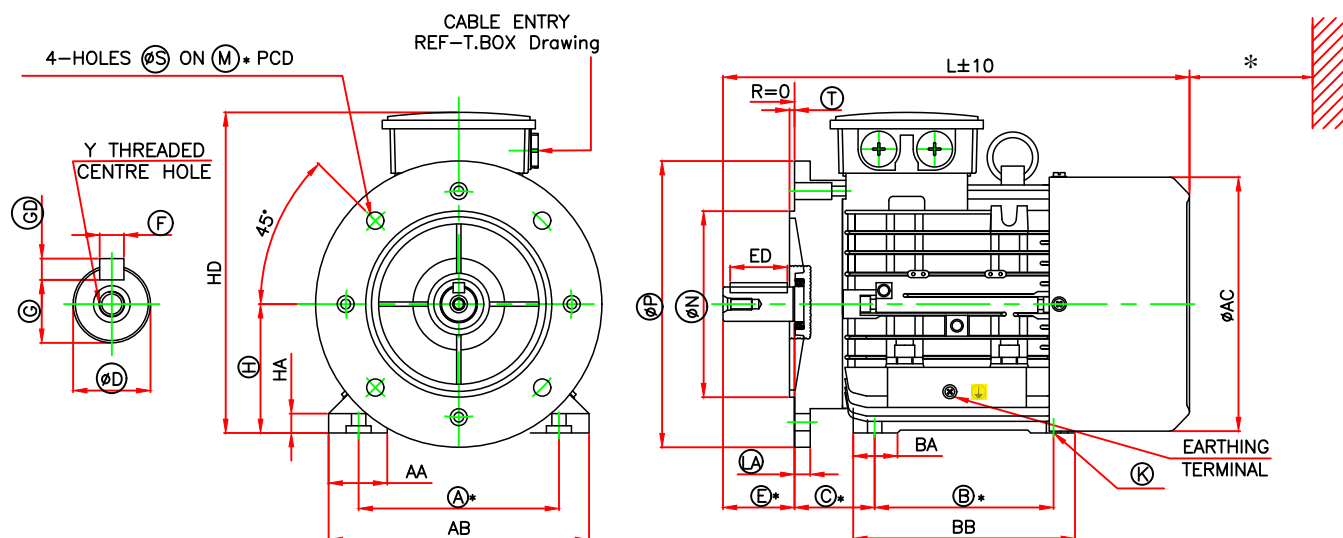


kW	1.5	Customer	
Pole	4	PO No / Enq. No	
Frame	KM90L	Date	
Mounting	B35	Product Code	KM2.1T50.BHA.B35.TSS
Checked	BMD	21-06-2023	
Approved	SSN	21-06-2023	Document No KM2-002 Rev. 0

KIRLOSKAR OIL ENGINES LTD.
ELECTRIC MOTORS



GENERAL ARRANGEMENT DRAWING FOR TEFC 3 PHASE INDUCTION MOTOR



FRAME	FOOT FIXING									FLANGE FIXING					
	A	B	C	H TOL.	AA	AB	BA	BB	K TOL.	M TOL.	N TOL.	P	S	T	LA
KM90L	140	125	56	90/89.5	41	182	31	155	17.5 X 10	165	130.014/129.989	200	12	3.5	10

D END SHAFT EXTENSION AND KEY							OVER ALL			
D TOL.	E	ED	F TOL.	GD TOL.	G	Y	AC	L	HD	HA
24.009/23.996	50	40	8/7.964	7/6.91	20/19.9	M8X19	178	330	224	13.5

kW	PRODUCT CODE	PRODUCT CODE	PRODUCT CODE	PRODUCT CODE
	2 POLE	4 POLE	6 POLE	8 POLE
0.55	--	--	--	KM2.0T55.DHA.B35.TSS
1.1	--	--	KM2.1T10.CHA.B35.TSS	--
1.5	--	KM2.1T50.BHA.B35.TSS	--	--
2.2	KM2.2T20.AHA.B35.TSS	--	--	--

NOTES:

- ONE EARTHING TERMINAL IS PROVIDED INSIDE MAIN TERMINAL BOX.
- * 80mm MINIMUM DISTANCE TO BE MAINTAINED FOR EFFICIENT COOLING OF THE MOTOR.
- * TOLERANCES ON MANDATORY DIMENSIONS ARE AS PER IS:1231/IS:2223/IEC:60072

RINGED DIMENSIONS ARE AS PER IS:1231/IS:2223/IEC:60072-1

ALL DIMENSIONS ARE IN mm,

	NAME	DATE	kW	REFER TABLE	FRAME	KM90L
DRAWN	KSK	09/06/2023	POLE	REFER TABLE	MOUNTING	B35 (HORIZONTAL FOOT CUM FLANGE)
CHECKED	SGS	09/06/2023	PRODUCT CODE	REFER TABLE	CUSTOMER	
APPROVED	SSN	09/06/2023	MAX. CABLE SIZE	1RX3CX4MM ²	PO NO	
			PROJECT		CLIENT	

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ELECTRIC MOTORS

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

DRAWING NO
KM90LB35TSALR0

