

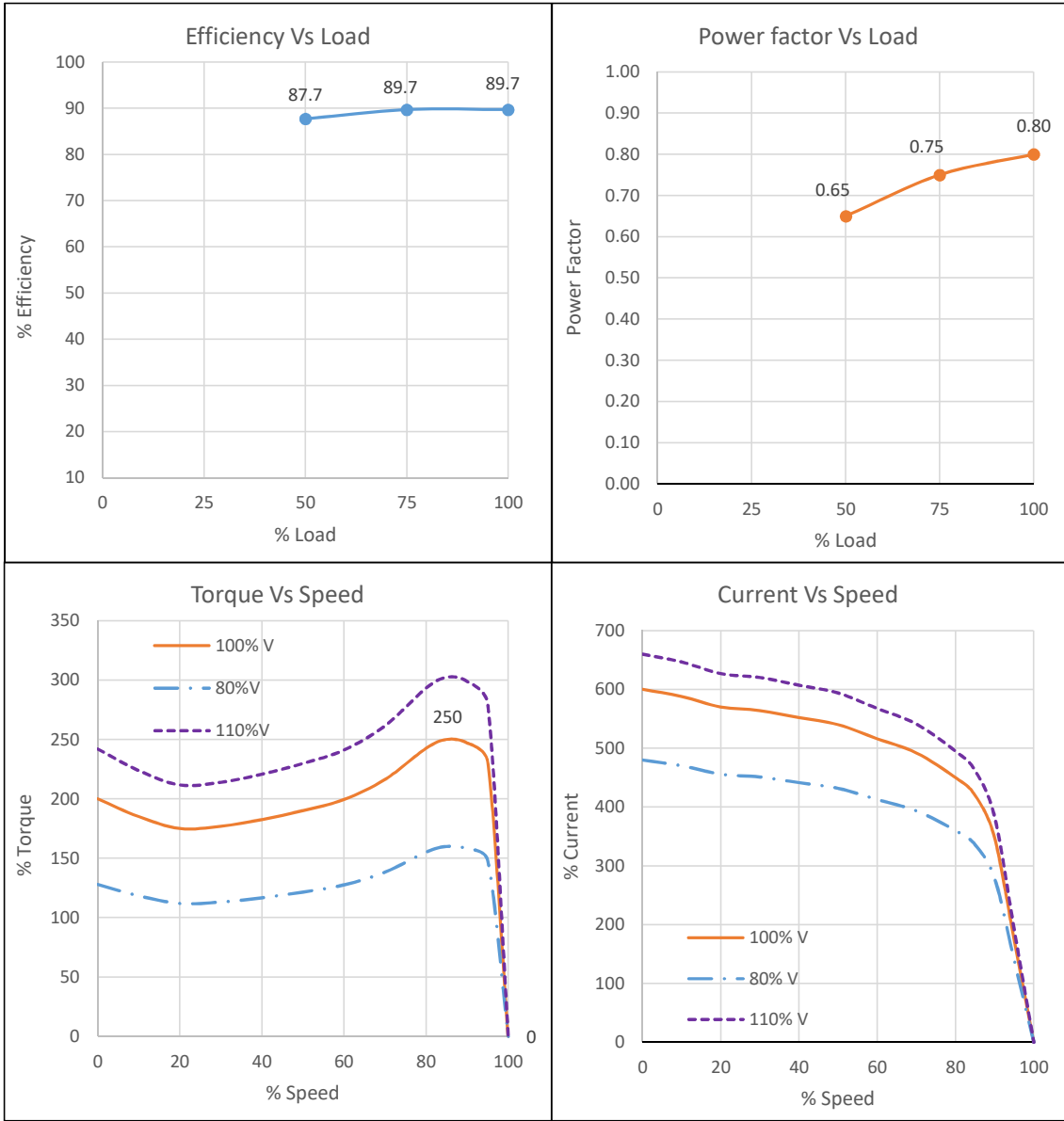
IE2

TECHNICAL DATASHEET 3 PHASE INDUCTION MOTOR

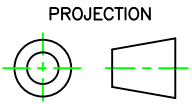


| Sr No | Parameter | Unit | Data |
|---|---------------------------------------|-------------------|--------------------------------------|
| Product Specifications | | | |
| 1 | Rated Output | kW | 15 |
| 2 | Number of Poles | No | 6 |
| 3 | Frame Designation | | KM180L |
| 4 | Product Code | | KM2.15T0.CMC.B03.TSS |
| 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 | 970 |
| 10 | Rated Current | A | 29 |
| 11 | Method of Starting | | Direct On Line |
| 12 | Starting Current (SCC) | % of FLA | 600 |
| 13 | Rated Torque | Kg-m | 15.06 |
| 14 | Starting Torque (STT) | % of FLT | 200 |
| 15 | Maximum Torque (POT) | % of FLT | 250 |
| 16 | Efficiency at 100% / 75% / 50% load | % | 89.7 / 89.7 / 87.7 |
| 17 | Power factor at 100% / 75% / 50% load | | 0.8 / 0.75 / 0.65 |
| 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 | Moment of Inertia GD ² | kg-m ² | 0.94 |
| 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 | 190 |
| 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 | ≤ 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 | | | |

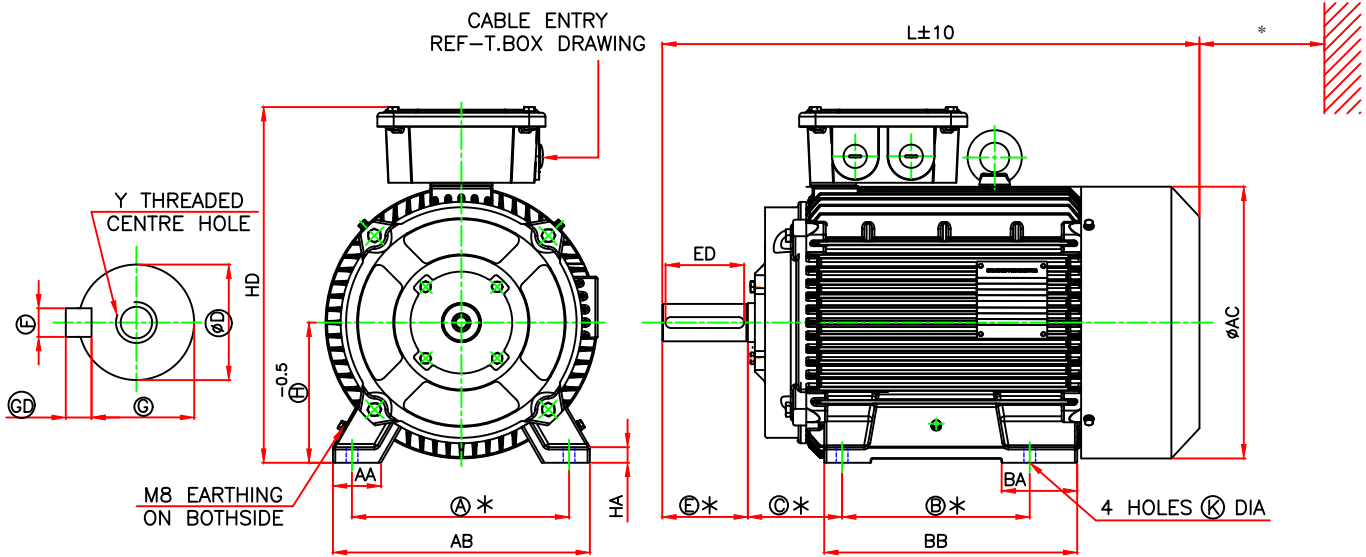
PERFORMANCE CURVE



| | | | |
|---|--------|-----------------|----------------------------|
| kW | 15 | Customer | |
| Pole | 6 | PO No / Enq. No | |
| Frame | KM180L | Date | |
| Mounting | B3 | Product Code | KM2.15T0.CMC.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 |
| KM180L | 279 | 279 | 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 | |
|----|----------------------|----------------------|
| | 4 POLE | 6 POLE |
| 22 | KM2.22T0.BMC.B03.TSS | -- |
| 15 | -- | KM2.15T0.CMC.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,

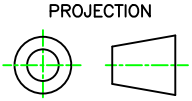
| | NAME | DATE | kW | REFER TABLE | FRAME | KM180L |
|----------|------|------------|-----------------|-------------------------|----------|----------------------|
| DRAWN | SGS | 23/12/2021 | POLE | REFER TABLE | MOUNTING | B3 (HORIZONTAL FOOT) |
| CHECKED | SGS | 23/12/2021 | PRODUCT CODE | REFER 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

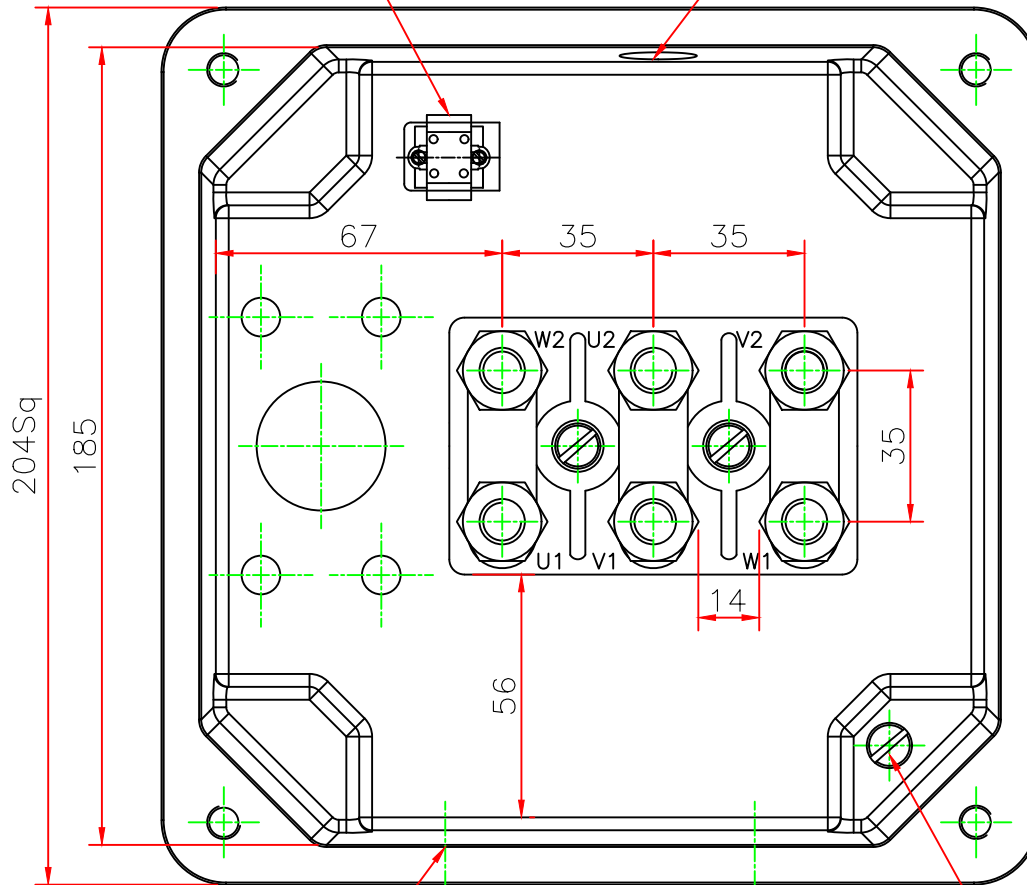
DRAWING NO
KM180LB3TSR1

TERMINAL ARRANGEMENT DRAWING



2 PO, 5A
Terminal WAGO Connector

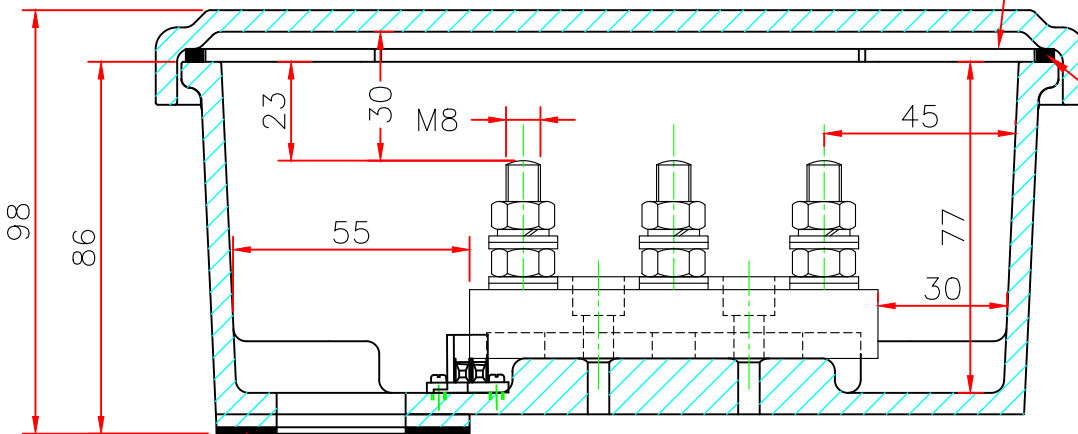
THERMISTOR CABLE
M12X1.5P-1No



EARTHING SIZE M8

CABLE ENTRY
REFER TABLE

TERMINAL BOX COVER



GASKET

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