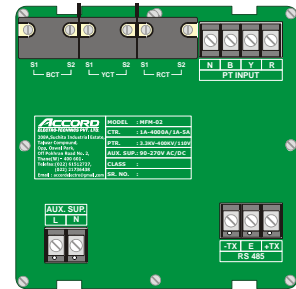
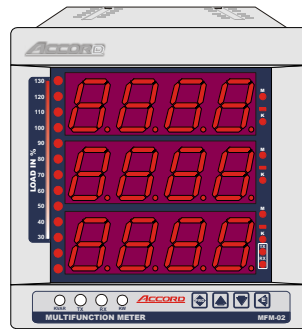


MFM 144 X 144 FLUSH CATALOG

FEATURES:

- By level monitoring of all Electrical Parameters viz.
- V, I, Φ , $\cos\Phi$, Hz, KVA, KVAR, KW & KWH.
- True RMS measurement.
- Available in different class of accuracies (0.2s %).
- User selectable display ranges / PT & CT Primary.
- Auto Scrolling / Manual display.
- RS485 communication port with MODBUS RTU Protocol.
- Front Optical communication port.
(TX & RX LED's are provided on front side.)
- Compatible for data logging & SCADA applications.
- In-built RTC (Real Time Clock) with calendar.



GENERAL SPECIFICATIONS:

- | | | |
|----|-------------------------|---|
| 1 | Version | : a) Single Phase b) 3 Φ -, 3-wire, 2-element, c) 3 Φ -, 4-wire, 3-element, d) 3 Φ -, 4-wire, 4-element
Specify the version required, while ordering. |
| 2 | Quadrant of Operation | : 4 |
| 3 | Display. | : Bright red 7-segment LED display. |
| 4 | Human Machine Interface | : Through Front Panel Tactile Keys. |
| 5 | Indications. | : i) Phase Voltage (V P to P), ii) Phase Current, iii) Line Voltage (VL), iv) Frequency (Hz), v) Power Factor (COS Φ), vi) KVA, vii) KVAR, viii) KW, ix) KVAH, x) KVARH, xi) KWH. |
| 6 | Voltage Inputs. | : Through suitable PT. Primary side: User selectable. Secondary side: 63.5/110/220/440AC Specify any one while ordering. |
| 7 | Current Inputs. | : Through suitable CT. Primary side: User selectable. Secondary side: 1A / 5A. Specify any one while ordering. |
| 8 | Auxiliary Supply. | : Rated: 85-250V AC/DC OR 48VDC 10%.(With +ve or -ve earthed) |
| 9 | VA burden. | : 1.5VA on PT for 140m which Aux. Supply is derived. 1VA on each PT for sensing. 0.5VA on each CT. |
| 10 | Frequency Range. | : 40 to 60 Hz. |
| 11 | Power Factor Range. | : 0.1 lag – 1 – 0.1 lead. |
| 12 | Over Voltage. | : 200% for 5 seconds. |
| 13 | Over Current. | : 2 times continuous, 20 times for 1 second |
| 14 | Response time. | : 200 milli-seconds. |
| 15 | Sampling Rate | : 32 samples per cycle. |
| 16 | Class Of Accuracy | : 0.2S as per IEC 60687, IS14697 |
| 17 | Complies to EMI/EMC | : IEC 61000-4-5,3,4 |
| 18 | Display Resolution | : Up to 1 decimal. |
| 19 | Output. | : Two communication ports with optical isolation. RS485 communication port with MODBUS RTU protocol. Front Optical communication port. (TX & RX LED's are provided on front side.) |
| 20 | Optional | : CT Shorting Terminals |
| 21 | Mounting. | : Flush, Panel Mounting. |
| 22 | Dimensions. | : 144x144mm. Panel cut-out: 138x138 mm. |
| 23 | Ambient Conditions. | : Working: 00 – 55 $^{\circ}$ C, 5 – 95% RH. Storage: -20 $^{\circ}$ C to 70 $^{\circ}$ C. |