MFM376-30V / MFM376-C-30V

Multifunction Meter



96 x 96mm

Features :

- 3Ø True RMS (Voltage, Current)
- 3Ø Power (Active, Reactive, Apparent)
- Import / Export Energy (Active, Reactive)
- Energy (Active, Reactive, Apparent)
- Max / Min Demand Power, Max Demand Current
- Programmable CT / PT Primary / Secondary
- Single Pulse Output
- Phase Angle Detection
- Run Hour
- Auxiliary Interrupts
- % THD Upto 31stlevel (MFM376-C-30V)
- MODBUS RTU Communication (RS485) (Optional)

Display Specifications

Display	3 rows, 7 segments LED Display
Digits	4
Display Scrolling	Automatic / Manual / Default
Display Reset	Programmable (For energy, Auxiliary interrupt, Run hour)

Input Specifications

Electrical Connection	3Ø - 3 wire, 3Ø - 4 wire, 2Ø - 3 wire, 1Ø - 2 wire
Input Voltage Range	11 to 300V AC (L - N) 19 to 550V AC (L - L)
Input Current Range	Nominal 5A AC (Min - 14mA, Max - 6A) **Note** : Product to be used only with external CT
Frequency	45 to 65Hz
Power Consumption	4VA max
Resolution	For energy : 0.01k, 0.1k, 1k, 0.01M, 0.1M, 1M (depending upon CT ratio x PT ratio) For Power, Voltage, Current : Auto Resolution For Power Factor : 0.001
Accuracy	Voltage (L - N / L - L) : ±0.5% of F.S. Current : ±0.5% of F.S. Power Factor : ±0.01 Frequency : ±0.1% For L - N Voltage >20V For L - L Voltage >35V Power (Active, Reactive, Apparent) : 1% Active Energy : Class 0.5S (IS : 14697-1999) Reactive & Apparent Energy : Class 1
Memory Retention	10 years (For energy)
Measuring Parameters	Voltage (L - L / L - N) (Individual / Average), Current (Individual / Average), Frequency, Power Factor (Individual / Total), Active, Reactive & Apparent Power (Individual / Total), Active, Reactive & Apparent Energy (Total), Phase Angle, Demand, Voltage Sequence Diagnostic, CT Polarity Error,Run Hour, Auxiliary Interrupts, Max / Min Demand Power, Energy (Active / Reactive), [Instantaneous Voltage (L - L / L - N), %THD upto 31stlevel, Max Demand Current (Individual), Import / Export] (only valid for MFM376-C-30V)

Output Specifications

Pulse Output	Voltage Range : External 24V DC max Current Capacity : 100mA max Pulse Width : 100ms ±5ms
Communication Interface and Protocol	RS485 and MODBUS RTU
Communication Address	1 to 255
Transmission Mode	Half duplex
Transmission Distance	500 meter maximum
Transmission Speed	300, 600, 1200, 2400, 4800, 9600, 19200 (in bps)
Parity	None, Odd, Even
Stop Bits	1 or 2
Response Time	100ms (max and independent of baud rate)

Auxiliary Supply Specifications

Supply Voltage	18 to 42V DC, 18V to 28V AC, 50 / 60Hz

Settable Parameters

CT Primary	1 / 5A to 10kA (Programmable for any value)
CT Secondary	1 / 5A (Programmable)
PT Primary	100V to 500kV (Programmable for any value)
PT Secondary	100V to 500V (Programmable for any value)

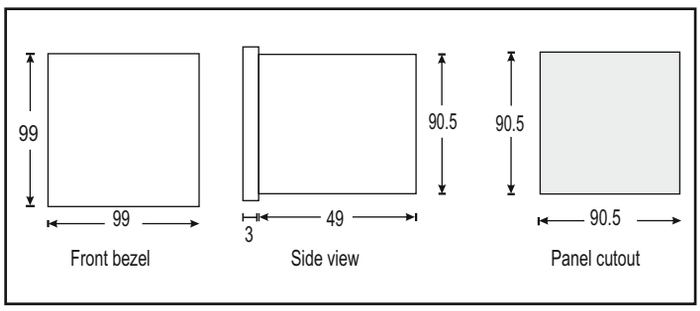
Environmental Specifications

Temperature	Operating : -10^{0}to 55℃ Storage : - 20^{0}to 75℃
Humidity (non - condensing)	Upto 85% RH

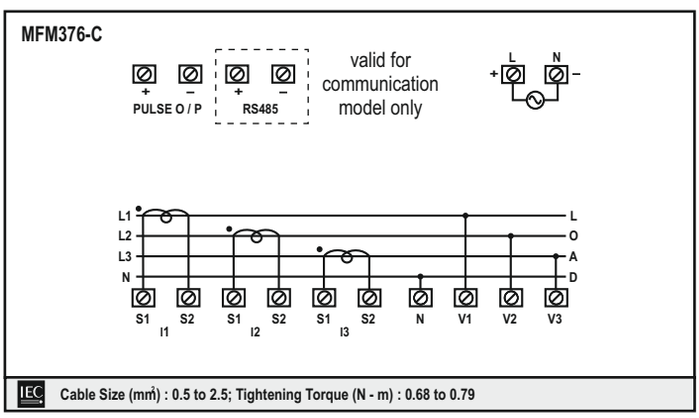
Mechanical Specifications

Mounting	Panel
Weight	230gms

Dimensions



Terminal Connection



Cable Size (mm²) : 0.5 to 2.5; Tightening Torque (N - m) : 0.68 to 0.79

Ordering Information

Product code	Supply Voltage	Output	
MFM376-30V	18V to 42V DC, 18 to 28V AC	Pulse Output	---
MFM376-C-30V	18V to 42V DC, 18 to 28V AC	Pulse Output	Comm. (RS485)