



Features:

- True RMS Measurement of 3Ø Voltage & Current Parameters
- 3 Ø Power and Power Factor Measurement
- Energy (Active, Reactive, Apparent)
- Programmable CT/PT Primary/Secondary
- CT Correction
- Total Harmonic Distortion
- Neutral Current Measurement
- Variable Pulse Width Selection
- Single Phase Network With Applicable Phase Selection
- Modbus RTU Communication (RS485)
- Single Pulse Output
- Max / Min Demand (Power)

Size: 96mm X 96mm (1/4 DIN)

Certifications: CE 

Technical Specifications

Display

Display	4 row, Liquid Crystal Display
Digit	4 (Lowest 8 digits for energy display)
Digit Height	0.44" (11.4mm) 0.25" (6.6mm) (for Lowest 8 digits)
Display Range	99999999
Bargraph	Representation of current

Input Specifications

Electrical Connection	3Ø-3/4 wire, 2Ø-3 wire, 1Ø-2 wire
Input Voltage Range	11 to 300V AC, (Phase to Neutral) 19 to 519V AC, (Phase to Phase)
Input Current Range	Nominal 5A AC (Min-11mA, Max-6A)
Frequency	45Hz - 65Hz
Display Scrolling	Automatic / manual
Display Reset	Programmable (for energy)
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), Current - ±0.5% of F.S Power factor - ±0.01 Frequency - ±0.1% (For V>20V L-N, V>35V L-L) Power (kW, kVA, kVA) - 1% Active energy - Class 1 Reactive energy - Class 1 Apparent energy - Class 1
Memory Retention	10 years (for energy)
Measuring Parameters	Voltage (L-L / L-N) (Individual / Average) Current (I1, I2, I3) (Individual / Average) Frequency, Power Factor (Individual / Average) Active, Reactive & Apparent power (Individual / Total), Active, Reactive & Apparent Energy (Total), Demand (Min / Max Active Power, Min / Max Reactive Power, Max Apparent Power), %THD upto 31 st order for Voltage & Current Parameters

Output Specifications

Pulse Output	Voltage Range - External 24V DC max Current Capacity - 100mA max Pulse Width - 100 ms ±5 ms
Communication	RS485 MODBUS Communication

Supply Specifications

Auxiliary Supply	MFM384: 100 to 240V AC, -15% +12%, 50/60 Hz, (±5%)
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Resettable Parameters

C.T Primary	1A/5A to 10,000A programmable for any value
C.T Secondary	1A/5A (External CT must be connected for current more than 5A)
P.T Primary	100V to 500kV programmable for any value
P.T Secondary	100V to 500V AC (L-L) programmable for any value

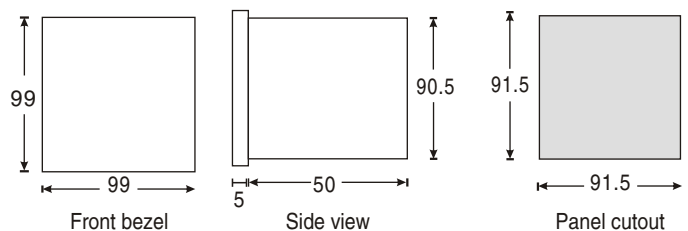
Environmental Specifications

Temperature	Operating Temperature: -10° to +55° C Storage Temperature : -20° to +75° C
Humidity (non-condensing)	Upto 85% RH

Mechanical Specifications

Mounting	Panel mount
Weight	MFM384: 318 gms

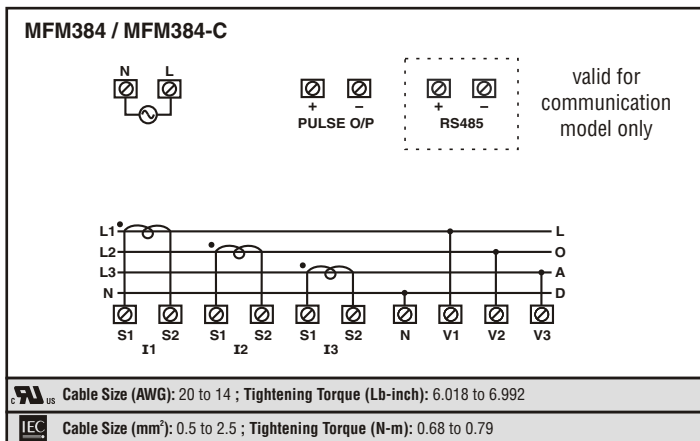
Dimensions



EMC

Electromagnetic compatibility	IEC 61326-1
ESD Immunity: IEC 61000-4-2	Level III
Surge Immunity: IEC 61000-4-5	+/- 2 kV common mode, +/- 1 kV differential mode
Radiated Susceptibility: IEC 61000-4-3	Level III, 80 to 1000MHz Level II, 1GHz to 2GHz Level I, 2GHz to 2.7GHz
Conducted Susceptibility: IEC 61000-4-6	Level II
Voltage Dips and Interruption: IEC 61000-4-11	Dips: 0% residual voltage/1 cycle (Crit B.), 40% residual voltage/10 cycles 50 Hz / 12 cycles 60 Hz (Crit C) 70% residual voltage / 25 cycles 50 Hz / 30 cycles 60 Hz (Crit C) Interruptions: 0% residual voltage / 250 cycles 50 Hz / 300 cycles 60 Hz (Crit C)
Conducted Emissions	CISPR-11 & IEC 61000-6-3
Radiated Emissions	CISPR-11
Electrical Fast Transient: IEC 61000-4-4	Level 3.

Terminal Connections



Ordering Information

Product	Supply Voltage	Output		Certification	
	100 to 240V AC	Pulse Output	Comm (RS485)	CE	cUL ^{us} LISTED
MFM384	■	■			
MFM384-CU	■	■		■	■
MFM384-C	■	■	■		
MFM384-C-CE	■	■	■	■	
MFM384-C-CU-G	■	■	■	■	■

EN-VIEW: Windows based communication software available for data logging.

Note: For grey product consult factory