



96 X 96mm

Features:

- 3Ø True RMS (Voltage, Current)
- 3 Ø Power (Active, Reactive & Apparent)
- Energy (Active, Reactive & Apparent)
- Programmable CT/PT Primary/Secondary
- Modbus RTU Communication (RS485) (Optional)
- Single Pulse Output

Certifications: CE 

Display Specifications

Display	3 rows, LCD with backlight Lowest 7 ½ digit for energy display
Digits	4 digits (Lowest 8 digits for Energy display)

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
Power Consumption	8VA Max
Display Reset	Programmable (For energy)
Resolution	For energy: 0.1k, 1k (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 L-N Voltage >20V For L-L Voltage >35V Power (Active, Reactive, Apparent): 1% Energy (Active, Reactive, Apparent): 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 / Total), Active, Reactive & Apparent Power (Individual / Total), Active, Reactive & Apparent Energy (Total)

Output Specifications

Pulse Output	Voltage Range: External 24V DC max. Current Capacity: 100mA max Pulse Width: 100 ms ±5 ms
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	100 ms (max and independent of baud rate)

Auxiliary Supply Specifications

Supply Voltage	100 to 240V AC, -15% to +12%, 50/60 Hz, (±5%)
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Settable Parameters

CT Primary	1/5A upto 10kA (Programmable for any Value)
CT Secondary	1/5A (Programmable)
PT Primary	100V to 10kV (Programmable for any Value)
PT Secondary	100V to 500V AC (L-L) (Programmable for any Value)

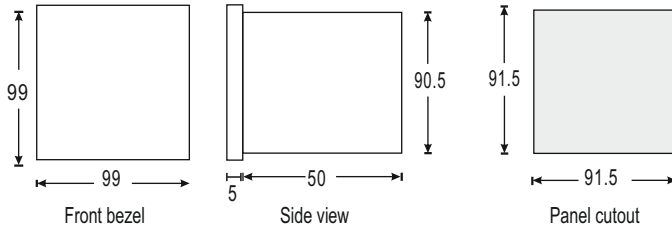
Environmental Specifications

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

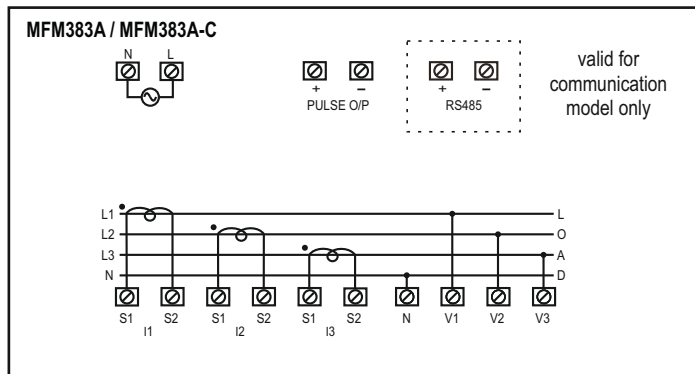
Mechanical Specifications

Mounting	Panel mount
Weight	310 gms

Dimensions



Terminal Connections



Compliance

Applicable EMI / EMC Standards		
Product Standard : IEC 61326-1		
Category		Standards Compliance
ESD Immunity	IEC 61000-4-2	Level IV (Air discharge : 15kV), (Contact Discharge : -8kV)
Surge Immunity	IEC 61000-4-5	+/- 2kV common mode, (Line to ground) +/- 1kV differential mode, (Line to Line)
Radiated Susceptibility	IEC 61000-4-3	Level III, 80 to 1000MHz (10V/m) Level II, 1.4GHz to 2GHz (3V/m) Level I, 2GHz to 2.7GHz (1V/m)
Conducted Susceptibility	IEC 61000-4-6	Level II (3V/m)
Voltage Dips and Interruptions	IEC 61000-4-11	Dips : 0% residual voltage / 1 cycle (Criteria B), 40% residual voltage / 10 cycles 50Hz / 12 cycles 60Hz (Criteria C) 70% residual voltage / 25 cycles 50Hz / 30 cycles 60Hz (Criteria C) Interruptions : 0% residual voltage / 250 cycles 50Hz / 300 cycles 60Hz (Criteria C)
Conducted Emission	CISPR-11	
Radiated Emission	CISPR-11	
Electrical Fast Transient	IEC 61000-4-4	Level III (2kV)

Ordering Information

Product Code	Supply Voltage	Output		Certification	
	100 to 240V AC (-15% to +12%)	Pulse Output	Comm. (RS485)	CE	LISTED
MFM383A	■	■			
MFM383A-C	■	■	■		
MFM383A-C-CE	■	■	■	■	

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