



Features:

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

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

Certifications:  LISTED

Technical Specifications

Display

Display	Liquid crystal display with backlight
Digit	3 rows of 4 digits
Digit Height	0.44" (11.4mm) 0.25" (6.6mm) (for Lowest 8 digits)

Input Specifications

Electrical Connection	3Ø-3/4 wire, 2Ø-3 wire, 1Ø-2 wire
Input Voltage Range	19 to 519V AC, (Phase to Phase) 11 to 300V AC, (Phase to Neutral)
Input Current Range	10mA - 5A (6A Max)
Frequency	45Hz - 65Hz
Display Scrolling	Automatic / manual
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: $\pm 0.5\%$ of F.S Power factor: $\pm 1\%$ Frequency: $\pm 0.1\%$ (For V>20V L-N, V>35V L-L) Power (kW, kVA, kVA): 1% Active energy: Class 1
Memory Retention	10 years
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 Energy (Total)

Output Specifications

Pulse Output	Voltage Range: External 24V DC Current Capacity: 100mA max Pulse Width: 100 ms $\pm$ 5 ms
Communication	RS485 MODBUS Communication

Supply Specifications

Auxiliary Supply	MFM383A/383A-C: 85 to 270V AC (50/60 Hz) MFM383A/383A-C-24V: DC- 18 to 42V AC- 18 to 28V (50/60 Hz)
------------------	---

Resettable Parameters

CT Primary	1A / 5A upto 10,000A (Programmable for any Value) Note : 1A or 5A depends upon the CT secondary
CT Secondary	1A or 5A (Programmable)
PT Primary	100V to 10000V (Programmable for any Value)
PT Secondary	100V to 500V (Programmable for any Value)

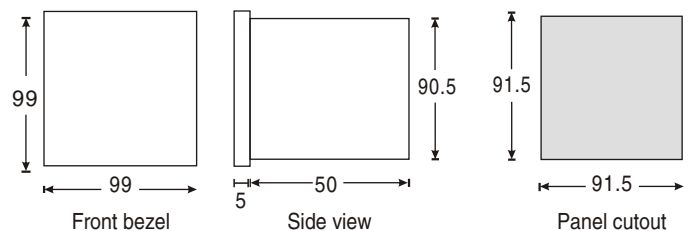
Environmental Specifications

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	MFM383A/383A-C: 310gms MFM383A/383A-C-24V: 295gms
Protection Level	IP65 for faceplate

Dimensions



Terminal Connections

MFM383A/383A-C

N

L

+

-

PULSE O/P

+

-

RS485

valid for communication model only

L1

L2

L3

N

S1

S2

I1

S1

S2

I2

S1

S2

I3

N

V1

V2

V3

L

O

A

D

MFM383A/383A-C-24V

-

+

+

-

PULSE O/P

+

-

RS485

valid for communication model only

L1

L2

L3

N

S1

S2

I1

S1

S2

I2

S1

S2

I3

N

V1

V2

V3

L

O

A

D

UL

US

Cable Size (AWG): 20 to 14 ; Tightening Torque (Lb-inch): 6.018 to 6.992

IEC

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

Ordering Information

Part No.	Supply Voltage		Output		Certification	
	85-270V AC	DC- 18 to 42V AC- 18 to 28V (50/60 Hz)	Pulse Output	Commn (RS485)	CE	UL LISTED
MFM383A	■		■			
MFM383A-CU	■		■		■	■
MFM383A-24V		■	■			

Note : For MFM383A-C(Communication version) / MFM383A-C-CU / MFM383A-C-24V please contact factory.

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