

MFM Series (Multi-Function Meters)

FEATURES

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



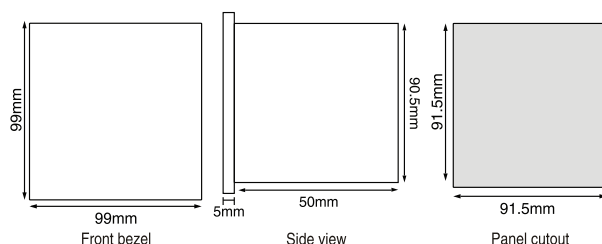
CAT. NO.

MFM384-C-CU

MFM383A-CU

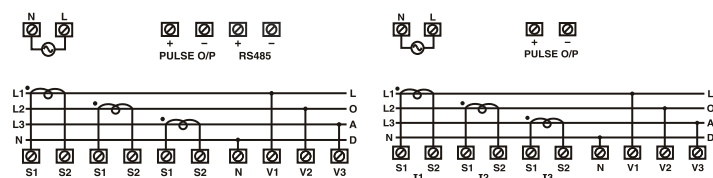
Display		
Display Type	LCD Display with backlight	LCD Display with backlight
Digits	4 rows of 4 digits 1 row of 8 digits for energy display	3 rows of 4 digits 1 row of 7.5 digits for energy display
Bargraph	Bargraph for current percentage	—
Display Scrolling	Automatic/ Manual	Automatic/ Manual
Supply Specification		
	85 ~ 270 VAC (50/ 60Hz)	85 ~ 270 VAC (50/ 60Hz)
Input Specification		
Electrical Wire System	3 Phase (3/4 wires), 2 Phase (3 wire), 1 Phase (2 wire)	3 Phase (3/4 wires), 2 Phase (3 wire), 1 Phase (2 wire)
Input Voltage Range	11 ~ 300 VAC (Phase to Neutral) 19 ~ 519 VAC (Phase to Phase)	11 ~ 300 VAC (Phase to Neutral) 19 ~ 519 VAC (Phase to Phase)
Input Current Range	10mA ~ 5A (External CT required for current >5A)	10mA ~ 5A (External CT required for current >5A)
Frequency	45 ~ 65Hz	45 ~ 65Hz
Parameter Resolution		
Energy	0.01k, 0.1k, 1k, 0.01M, 0.1M, 1M	0.01k, 0.1k, 1k depending on CT ratio x PT ratio
Power, Voltage, Current	Auto resolution	Auto resolution
Power Factor	0.001	0.001
Accuracy Class		
Voltage (L-N, L-L), Current	+/- 0.5% of Full-Scale Value	+/- 0.5% of Full-Scale Value
Power Factor	+/- 1%	+/- 1%
Frequency	0.1 Hz +/- 0.1 Hz	0.1 Hz +/- 0.1 Hz
Active, Reactive, Apparent Power	1%	1%
Active, Reactive, Apparent Energy	Class 1	Class 1
Output Specifications		
Pulse Output	1	1
Pulse Voltage	24 VDC max.	24 VDC max.
Pulse Current	100mA max.	100mA max.
Pulse Duration	100ms +/- 5ms	100ms +/- 5ms
Communication	RS485 MODBUS Communication	—
Programmable Parameters		
CT Primary	1A/ 5A ~ 10,000A (Programmable for any value)	1A/ 5A ~ 10,000A (Programmable for any value)
CT Secondary	1A/ 5A (External CT must be connected for current >5A)	1A/ 5A (External CT must be connected for current >5A)
PT Primary	100V ~ 500 kV (any value)	100V ~ 10 kV (any value)
PT Secondary	100V ~ 500 VAC (any value)	100V ~ 500 VAC (any value)
Environmental Specifications		
Temperature	Operating: -10°C~55°C, Storage: -20°C~ 75°C	Operating: -10°C~55°C, Storage: -20°C~ 75°C
Humidity	Up to 85% RH	Up to 85% RH
Protection Level	IP65 for Faceplate	IP65 for Faceplate
Physical Specifications		
Size	1/4 DIN, 96 mm x 96 mm	1/4 DIN, 96 mm x 96 mm
Weight	0.70 lbs (318g)	0.70 lbs (318g)
Terminal Size Acceptability and Torque	20-14 AWG (0.5 - 2.5mm ²), 6-7 lb-in. (0.68 - 0.79Nm)	20-14 AWG (0.5 - 2.5mm ²), 6-7 lb-in. (0.68 - 0.79Nm)

DIMENSIONS



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TERMINAL CONNECTIONS



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MFM383A-CU