



DIN 70mm

Features :

- True RMS Measurement
- 4 Module DIN Rail Mounted
- MID B+D Certified
- Energy Pulse LED
- -1A or -5A Current Transformer Input
- 1Ø or 3Ø Network Compatible
- Programable Voltage & Current Transformer Ratio
- High Definition white backlit LCD Display
- Simple Programming & Operation
- MODBUS Communication
- Auto & Manual Page Scrolling
- Max / Min Demand Power

Display Specifications

Display Type	3 Rows, High Definition white backlit LCD	
Digits	1 row of 4 digits 2 rows of 7 digits	
Digits Height	6.35mm (Displayed Parameter)	
Page Scrolling	Auto / Manual	
Displayed Parameters and Accuracies	Voltage	0.5% of Full Scale
	Current	0.5% of Full Scale
	Frequency	0.1% of Full Scale(L-N>20V)
	Power Factor	± 0.01 (digit)
	Active Power	1%
	Reactive Power	1%
	Apparent Power	1%
	Active Energy	Class 1, Class B (IEC / EN 62053-21, IEC / EN 50470-3)
	Reactive Energy	Class 2 (IEC / EN62053-23)
Energy Maximum Display	99999999	
Resolution	0.01K, 0.1K,1K, 0.01M, 0.1M (Depending on CT Ratio & PT Ratio)	

Input Specifications

Connection	1Ø (CT on L1 only), 3Ø - 4 wire
Input Voltage Range	85 to 240V (L - N) 147 to 415V (L - L)
Voltage Rated Burden	<0.2VA
Nominal Current Input	0.05 to 5A
Max Current (Imax)	6A (1.2 x Nominal)
Current rated Burden	0.5 VA
Starting Current	10mA
Short Time Over-Current	30 x Imax to IEC / EN62053-21 + 23
Impulse Voltage with Stand	6kV 1.2/50µS 0.5J
AC Voltage with Stand	4kV 50Hz for 1 min.
CT Primary	1/5A to 6000A (Programmable for any value)
CT Secondary	1 or 5A (Programmable for any value)
PT Primary	100 to 600V (Programmable for any value)
PT Secondary	173 to 415V AC (L-L) (Programmable for any value)
Frequency	50 Hz
Current Distortion Factor	According to IEC/EN50470
Measuring Parameters	Voltage - L-L, L-N and Average Current - Per Phase and Average Power Factor - Per Phase and Average Frequency Power - Active, Reactive & Apparent (Per Phase & Total) Power Max. Demand - Active, Reactive & Apparent (Max demand) Energy - Active, Reactive & Apparent Import & Export Energy - Active, Reactive & Apparent (Per Phase)

Output Specifications

Communication Interface and Protocol	RS485 and MODBUS RTU
Communication Address	1 to 255
No. of Bits	8 Bits
Parity	None, Odd, Even
Baud rate	300, 600, 1200, 2400, 4800, 9600, 19200 (in bps)
Response Time	≤100ms
No. of Meters Connected on the Bus	32 (up to 255 with RS485 Repeater)
Max Distance from Master Device	500M

Auxiliary Supply Specifications

Voltage Range	85 to 270V AC
Operating Frequency	45 to 65Hz
Power Consumption	<8VA

Insulation

Installation Category	III
Pollution Degree	2
Insulation Voltage Rating	300V (L - N)

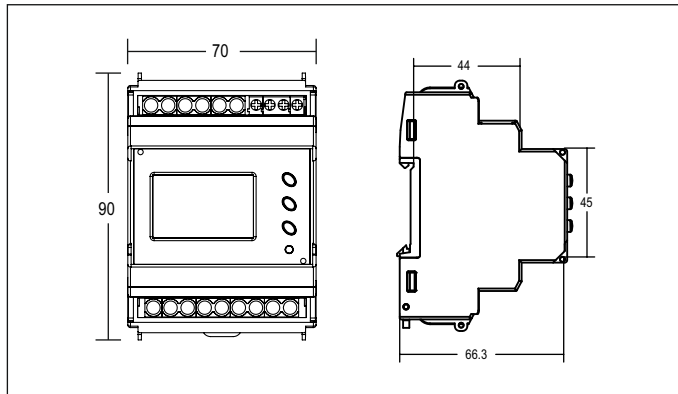
Environmental Specifications

Reference Temperature	23°C ± 2°C
Specified Temperature	-10°C to +55°C
Operating Range	
Storage Temperature	-20°C to +75°C
Relative Humidity	85% (non - condensing)
Mechanical Environment	M1
Electromagnetic Environment	E2

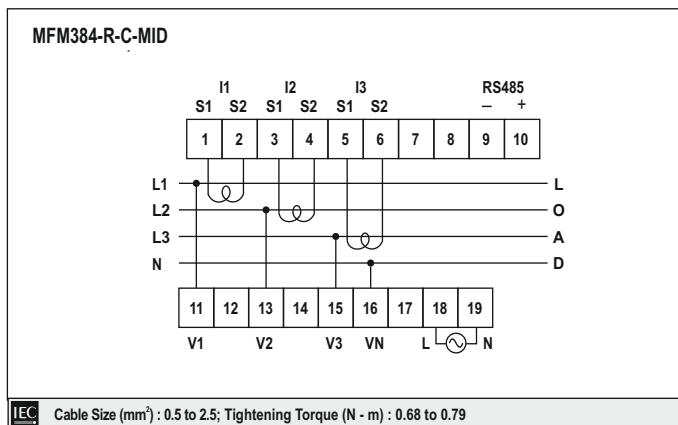
Mechanical Specifications

Housing	
Housing	4 Module DIN 43880
Mounting	Snap- on 35mm Rail
Tamper Sealing	Meter Housing (by Means of a Tamper Evident Seal). Sealable Terminal Covers
Housing Material	Self - Extinguishing Polycarbonate (UL94 V-0)
Protection Degree (IEC/ EN60529)	IP20 (Terminal) IP51 (Front of Housing)
Weight	<215g
Termination	
Current Input Terminal Type	Screw clamp type
Max. Wire Size	4.0mm ²
Voltage Input Terminal Type	Screw clamp type
Max. Wire Size	4.0mm ²
Output Terminal Type	Screw clamp type
Max. Wire Size	2.5mm ²

Dimensions (All dimensions are in mm)



Terminal Connection



Conformity

Electromagnetic Compatibility	IEC / EN61326-1, IEC / EN55011 Class A, IEC / EN61000-4-2, -3,-4, -5, -6, -8, -11, IEC / EN50470-1/3
Accuracy and Functionally	IEC / EN50470-1/3, IEC / EN62053-21, IEC / EN62053-23, DIRECTIVE 2014/32/EU
Safety	IEC / EN61010, IEC / EN50470-1

Model Selection Table

Communication	Model
Modbus and Pulse Output	MFM384-R-C-MID
Mbus and Pulse Output	Coming Soon