

PRELIMINARY
DATASHEET

Features:

- 3 \emptyset (True rms) Voltage
- 3 \emptyset (True rms) Current
- 3 \emptyset Power Factor
- 3 \emptyset Power (Active, Reactive, Apparent)
- Energy (Active, Reactive, Apparent)
- Frequency
- Programmable CT/PT Primary/Secondary
- Single Pulse Output

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

Technical Specifications

Display	
Display	3 rows, 7 segment LED
Digit	4

Input Specifications	
Electrical Connection	3 \emptyset -3/4 wire, 1 \emptyset -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
Power Consumption	0.5VA
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: $\pm 0.5\%$ of F.S Power factor: ± 0.01 Frequency: ± 0.2 Hz Power : kW - Class 1, KVAR - Class 2 Energy : kWh - Class 1, KVARh - Class 2
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), Import & Export Energy, Harmonics (Up to 31st harmonics for Voltage & Current), Run Hour, ON Hour, Phase Angle, Demand, Interrupt Count, Voltage sequence diagnostic, CT polarity error

Supply Specifications	
Auxiliary Supply	230V, $\pm 20\%$
VA Rating	<8A

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	-20 $^{\circ}$ to +60 $^{\circ}$ C
Humidity (non-condensing)	Upto 85% RH

Mechanical Specifications	
Mounting	Panel mount

Dimensions	
<p>Front bezel</p>	<p>Side view</p>
<p>Panel cutout</p>	

Output Specifications	
Pulse Output	Voltage Range: External 24V DC max Current Capacity: 100mA max Pulse Width: 100 ms ± 5 ms

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.

Ordering Information

Product	Supply Voltage	Output
	230V AC	Pulse Output
MFM376-230V	■	■

Terminal Connections

