## MFM376-CE



#### **Display specifications**

Display	7 segments LED , 3 rows 2 rows of 8 digits for energy display
Digits	4 digits
Digit height	0.49"
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
Protection features	Password protected for set-up & clearing energy and Min/Max data

### Input specifications

Type of measurement	TRUE RMS
Sampling rate	100 Samples / Cycle
Electrical connections	3Ø - 3 wire (Delta), 3Ø - 4 wire (Wye) 2Ø - 3 wire, 1Ø - 2 wire (L-N)
Data update rate	
Instantaneous	1 sec
Demand	15 sec
Harmonics	5 sec
Input-voltage	
PT primary	100V to 500kV (Programmable for any value)
PT secondary	100V to 500V (Programmable for any value)
Voltage nominal	240V AC L-N / 415V AC L-L
Measured V with full range	11 to 300V AC L-N, 19 to 519V AC L-L
Permanent overload	750 V AC L-L
Impedance	≥0.8MΩ
Frequency range	45 - 65Hz
VA burden	<0.2VA at 300V AC L-N / Phase
Input Current	
CT ratings primary	1/5A to 10kA (Programmable for any value)
CT ratings secondary	1/5A Programmable
Current nominal	5A
Measured amps with over range & crest factor	20mA to 6A
Withstand	120A for 1 sec
Frequency range	45 - 65Hz
VA burden	0.5VA at 5A / Phase

## Features :

- 3Ø True RMS (Voltage, Current)
- 3Ø Power (Active, Reactive, Apparent)
- Energy (Active, Reactive, Apparent)
- Programmable CT / PT Primary / Secondary
- Import / Export Energy
- Single pulse output
- Phase angle detection
- Max / Min demand power
- Run hour
- Auxiliary supply of 40 to 300V AC / DC

## Certifications : CE

Measurement accuracy	
Current	±0.5% of F.S.
Voltage	±0.5% of F.S.
Power factor	±0.01
Power	±1%
Frequency	±0.1% For L-N Voltage >20V, For L-L Voltage >35V
Active energy	Class 1 as per IEC62053-21
Reactive energy	Class 1 as per IEC62053-21
THD & Individual Harmonic, V& A	Up to 31 <sup>st</sup> Level

#### **Output specification**

Pulse output	Voltage range : External 24V DC max Current capacity : 100mA max Pulse width : 100 ms ±5 ms Configurable pulse weight from 1 to 9999000 pulses/kWh
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#### Mechanical specifications

Weight	200 gms (7 Oz)
Material	MAKROLON 6557 SMOKE BLACK
IP degree of protection	(IEC 60529) IP51 Front only
Torque at terminals	0.68N-m to 0.79 N-m
Wire gauge at terminals	20 to 14AWG;75°C
Mounting position	Vertical

#### Auxiliary supply specifications

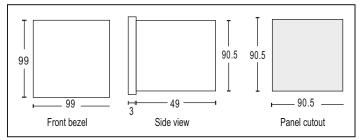
Operating range	40 to 300V AC / DC
Burden	< 6 VA at 277 V L-N
Frequency	50 / 60 Hz nominal
Ride-through time	100 ms typical at 230V AC and maximum burden

#### **Environmental specifications**

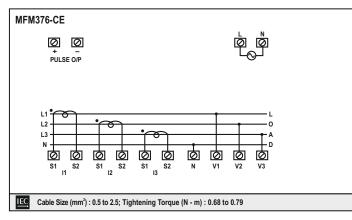
Operating temperature	Meter -10°C to +55°C (14°F to 131°F)
Storage temperature	Meter -20°C TO +75°C (-4°F to +167°F)
Humidity	Up to 85% RH (Non-Condensing)
Altitude	Up to 2000 meters (6561 ft.)
Measurement category	CAT III
Pollution degree	2
Product life	> 5 years
Measurement category Pollution degree	CAT III 2

# MFM376-CE

Dimensions (All are in mm)



Terminal connection



#### Compliance

Applicable EMI / EMC Standards				
Product Standard : IEC 61326 - 1				
Category	Standards compliance			
Electrostatic discharge	IEC 61000 - 4 - 2			
Immunity to electromagnetic RF fields	IEC 61000 - 4 - 3			
Conducted immunity	IEC 61000 - 4 - 6			
Immunity to magnetic fields	IEC 61000 - 4 - 8			
Immunity to voltage dips and interruptions	IEC 61000 - 4 - 11			
Fast transient	IEC 61000 - 4 - 4			
Immunity to surge waves	IEC 61000 - 4 - 5			
Conducted and radiated emissions	CISPR-22 / CISPR-11			
Safety and Standards				
IEC61010 Edition 3.0 CAT III, Protection class II IEC 61326 - 1				
			CAT III up to 480 V L-L CAT II up to 600 V L-L	
CAT III up to 300 V L-N As per IEC/UL 61010-1 Ed-3				

## **Ordering information**

Product code	Supply voltage	Output		0
		Pulse output	Comm. (RS485)	Certification
MFM376-CE	40 to 300V AC / DC	YES		CE