



DPM380

Features

LCD display with back lighting with Modbus-RTU communication

MEASUREMENT PARAMETERS:

- Phase Voltage (L-N) & Line Voltage (L-L)
- Min & Max Phase and Line Voltage
- Phase Current and Neutral Current
- Min & Max Phase Current and Neutral Current
- Bidirectional kW (per phase & total)
- Bidirectional kVAR (per phase & total)
- kVA (per phase & total)
- Min & Max kW, kVAR and kVA
- Frequency
- True & Displacement Power Factor (per phase & total)
- Energy kWh, kVARh and kVAh
- THD Phase Voltage (L-N)
- THD Phase Current
- Power Demand (kW, kVAR & kVA)
- Maximum Power Demand (kW, kVAR & kVA)

Technical Data

DISPLAY TYPE

LCD display

MEASUREMENTS

3-phase 4-wire system
3-phase 3-wire system

CURRENT MEASUREMENT (TRMS)

CT primary : 5 ~ 9995 A
CT secondary : 5 A
Minimum measurement : 5 mA
Accuracy : 0.5% from 1A to 6 A (secondary)
: < 0.05 VA at 5 A
Burden : < 0.05 VA at 5 A
Sustained overload : 6 A

VOLTAGE MEASUREMENT (TRMS)

Nominal phase voltage : 20 ~ 300 V AC
Minimum measurement : 10 V
Accuracy : 0.5% at full scale
Phase voltage via VT : 60 ~ 33,000 V

POWER MEASUREMENT

Real power, apparent power, reactive power measurement
Measuring updating period : 1 s
Accuracy : 1.0%

POWER DEMAND

Interval : 1 ~ 30 mins

POWER FACTOR MEASUREMENT

Total and displacement power factor accuracy : 1%

FREQUENCY MEASUREMENT

Measurement range : 45~65Hz
Measurement updating period : 1s
Accuracy : 0.5%

ENERGY ACCURACY

Active (according to IEC 62053-21) : class 1
Reactive (according to IEC 62053-23) : class 2

AUXILIARY POWER SUPPLY

AC voltage : 90 ~ 415 V AC
Frequency : 50 / 60 Hz
DC voltage : 100 ~ 300 V DC
Power consumption : <3 VA

COMMUNICATION

Hardware interface : Isolated RS485
Protocol : Modbus-RTU
Baud rate : 2400, 4800, 9600, 19200, 38400

ENVIRONMENTAL CONDITIONS

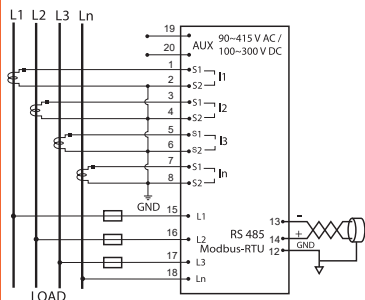
Temperature : -10°C to 55°C
Humidity : 5% to 95%, non-condensing

MECHANICAL

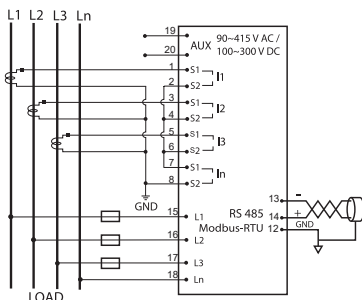
Mounting : Panel mounting
Dimension (mm) : 96(w) x 96(h) x 105(d)
Approximate weight : 0.48kg
Enclosure protection : IP54 at the panel
IP20 at the body

Typical Application Diagram

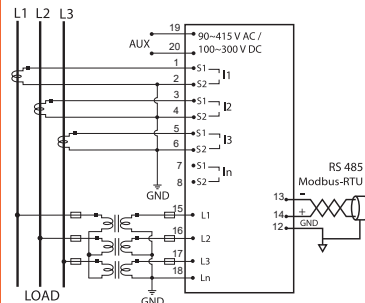
3-PHASE 4-WIRE SYSTEM:4CTs, direct V input.



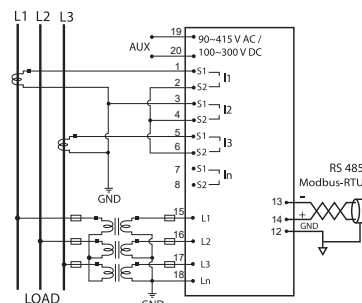
3-PHASE 4-WIRE SYSTEM:3CTs, direct V input.



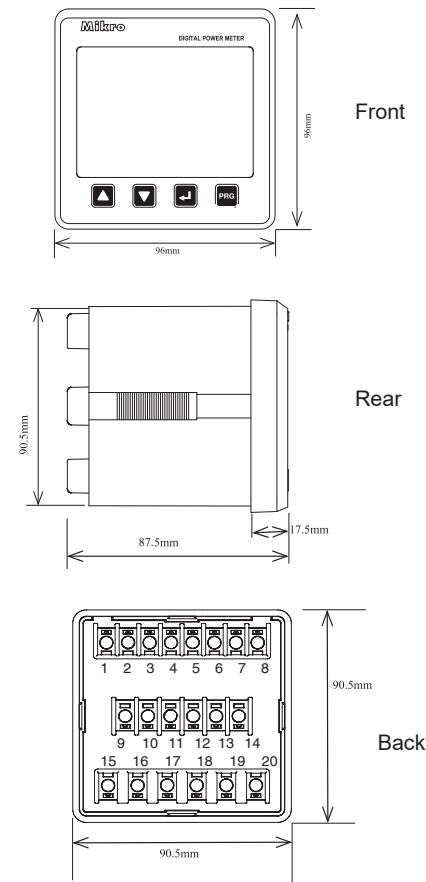
3-PHASE 3-WIRE SYSTEM:3CTs, 3VTs



3-PHASE 3-WIRE SYSTEM:2CTs, 3VTs



Case Dimensions



Electromagnetic Compatibility (EMC)

Part 6-2: Generic Standards IEC61000-6-2
Immunity for industrial environments.

Part 6-4: Generic Standards IEC61000-6-4
Emission standard for industrial environments.

Ordering Information

MODEL	DESCRIPTION
DPM 380-415AD	Auxiliary Voltage 90 ~ 415 V AC or 100 ~ 300 V DC

Cut-Out Recommendations

