



DM38

Features

- LCD display with back lighting
- Modbus-RTU communication
- DIN rail type

MEASUREMENT PARAMETERS:

- Phase Voltage (L-N)
- Line Voltage (L-L)
- Phase Current
- Bidirectional kW (per phase & total)
- Bidirectional kVAR (per phase & total)
- Bidirectional kVA (per phase & total)
- Frequency
- Power Factor (per phase & total)
- Energy (+ and -) for kWh, kVARh and kVAh

Technical Data

DISPLAY TYPE

LCD display

MEASUREMENTS

3-phase 4-wire system

CURRENT MEASUREMENT (TRMS)

CT primary : 5 ~ 8000 A
 CT secondary : 5 A
 Minimum measurement : 10 mA
 Accuracy : 0.5% from 1A to
 6 A (secondary)
 Burden : < 0.03 VA at 5 A
 Sustained overload : 6 A

VOLTAGE MEASUREMENT (TRMS)

Nominal phase voltage : 70 ~ 300 V AC
 Minimum measurement : 10 V
 Accuracy : 0.5% at full scale
 Phase voltage via VT : 60 ~ 50,000 V

POWER MEASUREMENT

Real power, apparent power, reactive power
 measurement

Measuring updating period : 1 s
 Accuracy : 1.0%

POWER FACTOR MEASUREMENT

Total and displacement power factor
 Accuracy : 1.0%

FREQUENCY MEASUREMENT

Measurement range : 45 ~ 65 Hz
 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

POWER SUPPLY

Self supplied : 100 ~ 240 V AC
 Frequency : 50 / 60 Hz
 Power consumption : <3 VA

COMMUNICATION

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

ENVIRONMENTAL CONDITIONS

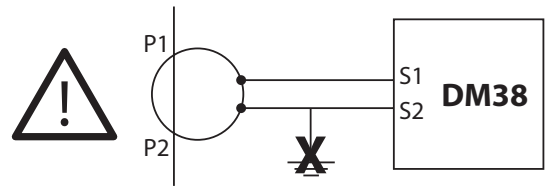
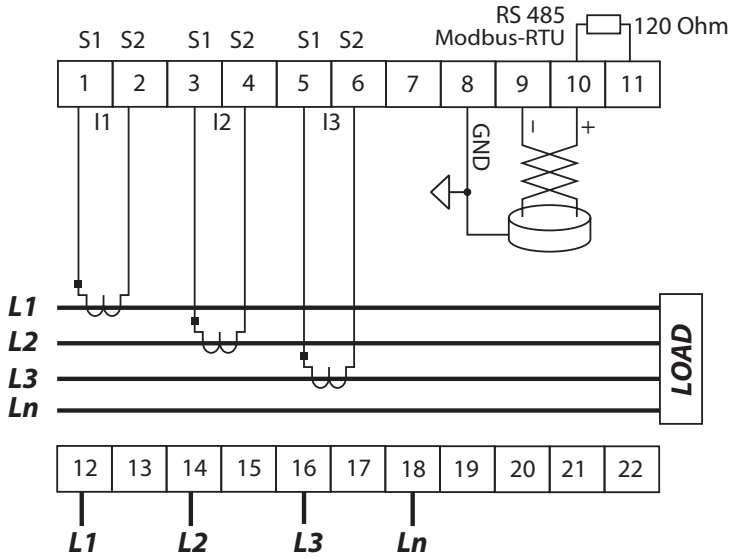
Operating temperature : -10°C ~ +55°C
 Storage temperature : -20°C ~ +70°C
 Humidity : 0 - 95%,
 non condensing

MECHANICAL

Mounting : DIN rail
 Dimension (mm) : 65(w) x 85(h) x 50(d)
 Approximate weight : 0.3 kg

Typical Application Diagram

DM 38 CONNECTION DIAGRAM



NOTE: Current transformer secondary terminal **MUST NOT** be earthed.

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
DM 38-240A	Self Powered 100~240 V AC

Case Dimensions

