



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 6A (secondary)
Sustained overload	: 6A

VOLTAGE MEASUREMENT (TRMS)

Direct measurement phase - phase	: 120 ~ 415 V AC ± 20%
Direct measurement phase - neutral	: 70 ~ 265 V AC ± 20%
Accuracy	: 0.5%
Sustained overload	: 300 V AC (L-N) : 520 V AC (L-L)

POWER MEASUREMENT

Real power, apparent power, reactive power measurement

Measuring updating period	: 1 s
Accuracy	: 1.0%

POWER FACTOR MEASUREMENT

Accuracy	: 1.0%
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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

OPERATING CONDITIONS

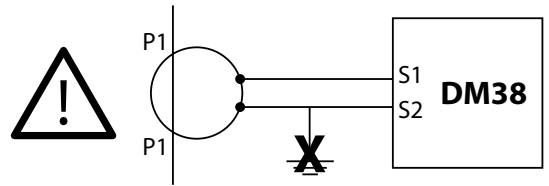
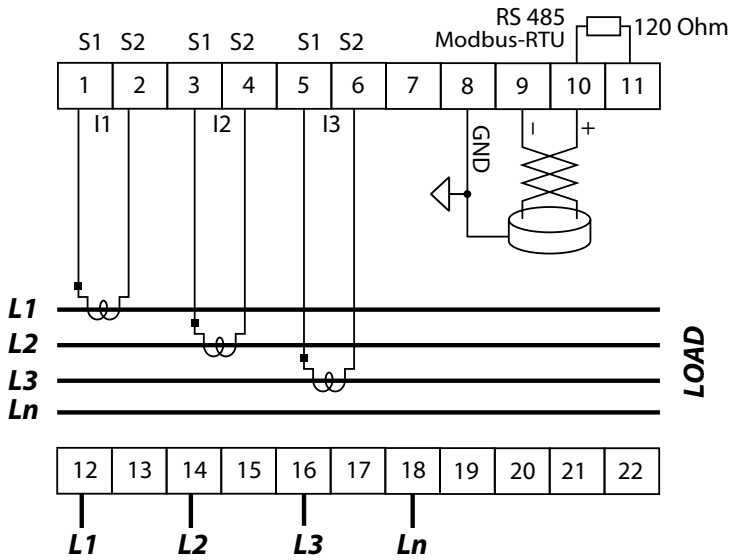
Operating temperature	: -10°C ~ +55°C
Storage Temperature	: -20°C ~ +70°C

MECHANICAL

Mounting	: DIN rail
Approximate weight	: 200g

Typical Application Diagram

DM 38 CONNECTION DIAGRAM



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

Electromagnetic Compatibility (EMC)

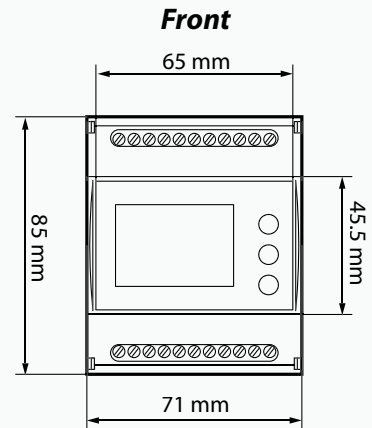
Part 6-2: Generic Standards IEC61000-6-2

Immunity for industrial environments.

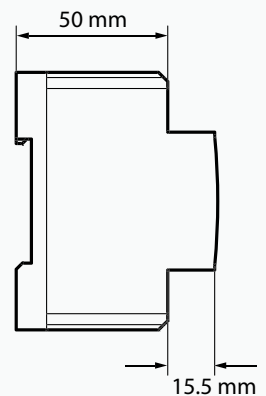
Part 6-4: Generic Standards IEC61000-6-4

Emission standard for industrial environments.

CASE DIMENSIONS



Side



Ordering Information

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

