



PRODUCT OVERVIEW

Digital power meter that monitors various parameters in the electrical system. It includes measurements such as Voltage, Frequency, Current, Power Factor, Energy (kVAh, kWh & kVARh) and Power (Apparent, Active & Reactive).

It incorporates a back-lit LCD for ease of display.

Using MODBUS RTU protocol, all stored information can be read and settings can be modified with a PC loaded with MerCs issued software.

FEATURES

- Din mount
- 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

ORDERING INFORMATION

PART NUMBER

ME-PM-DD-240A

*See Price List for CT's to suit DPM

DESCRIPTION

For 50Hz system, auxiliary voltage 100~240V AC

TECHNICAL DATA

DISPLAY TYPE

Back-lit LCD display

MEASUREMENTS

3-phase 4-wire system

POWER MEASUREMENT

Real power, apparent power, reactive power measurement

Measurement 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%

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

MECHANICAL

Mounting : DIN rail

Dimension (mm) : 65(w) x 85(h) x 50(d)

Approximate weight : 0.3 kg

Enclosure protection : IP20 at the panel

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

ENERGY ACCURACY

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

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

ENVIRONMENTAL CONDITIONS

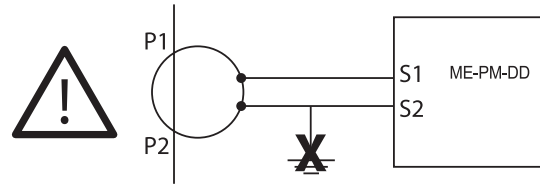
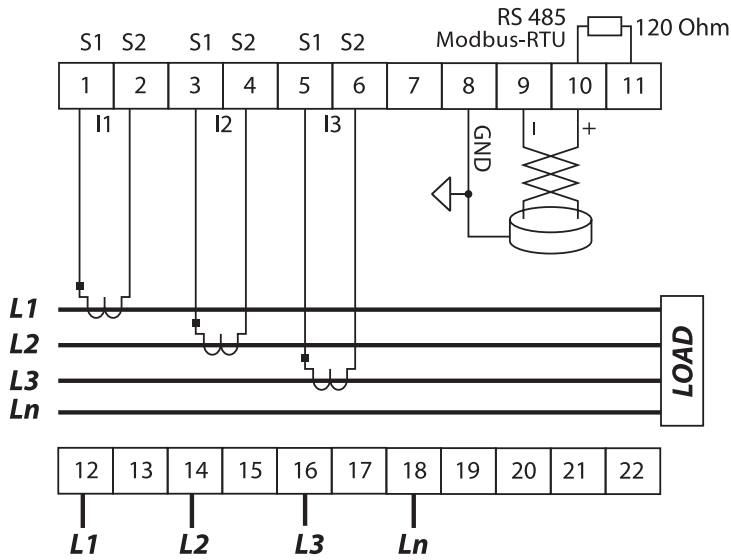
Operating temperature : -10°C ~ +55°C

Storage temperature : -20°C ~ +70°C

Humidity : 0 - 95%, non condensing

TYPICAL APPLICATION DIAGRAM

ME-PM-DD 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

