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# Single phase power-sensor

#### 1-phase power-sensor, current transformer



| Model number:                          |                               | PM1-E-D-CT                      |  |
|--|-------------------------------|---------------------------------|--|
| Connect to:                            |                               | MC-230                          |  |
|  |                               | RS485 power sensor bus A -<br>B |  |
| Mounting:                              |                               | DIN rail, 1M, 18 mm             |  |
| Dimensions:                            |                               | 18 × 62 × 119 mm                |  |
| Used for measuring power and energy of |                               |                                 |  |
| 1                                      | single-phase energy sources   |                                 |  |
| 1                                      | single-phase energy consumers |                                 |  |

# Applications

• Digital multi-function power sensor for single phase networks

### **Features**

- DIN rail mounting with 50A current transformer
- Compact design in a single module 18mm wide
- Seal-able cover(phase and neutral terminals)

## **General description**

The PM1-E-D series is an advanced single phase energy monitoring solution with built-in configuration push button and LCD data displaying, particularly indicated for active energy and other parameters metering and for cost allocation. Housing for DIN-rail mounting, IP51 protection degree.

# **Technical specifications**

| Technical Data     |       |
|--------------------|-------|
| Operating Humidity | ≤ 75% |

| Storage Humidity             | ≤ 95%                        |
|------------------------------|------------------------------|
| Operating Temperature        | -20°C - +50°C                |
| Storage Temperature          | -30°C - +70°C                |
| International Standard       | IEC 62053-21                 |
| Accuracy                     | Class 1                      |
| Mounting                     | DIN rail (DIN 43880)         |
| Sealing                      | IP51 Indoor                  |
| Nominal Voltage Input        | (Ph+N) 230V AC (176-276V AC) |
| Max Continuous Voltage       | 120% of nominal              |
| AC Voltage Withstand         | 4KV for 1 minute             |
| Impulse Voltage Withstand    | 6KV-1.2μS                    |
| Current Input                | 0.25-5A(6)A AC RMS           |
| Operational Current Range    | 0.4% lb-Imax                 |
| Over current withstand       | 20Imax for 0.01s             |
| Nominal Input Current Burden | 0.5VA                        |
| Frequency                    | 50Hz(±10%)                   |
| Power Consumption            | ≤ 2W/10VA/phase              |
| Accuracy                     |                              |
| Voltage, Current             | 0.5%                         |
| Frequency                    | 0.2% of Mid-Frequency        |
| Power Factor                 | 1% of Unity (0.01)           |
| Active Power, Apparent Power | $\leq$ 1% of Range Maximum   |
| Reactive Power               | ≤ 1% of Range Maximum        |
| Reactive Energy (Varh)       | Class 2                      |
| Active Energy (Wh)           | Class 1                      |
| Modbus                       |                              |
| Bus Type                     | RS485 (Semi-Duplex)          |
| Protocol                     | Modbus RTU                   |
| Baud Rate                    | 1200/2400/4800/9600bps       |
| Address Range                | 1-247                        |
| Max. Bus Loading             | 64pcs                        |
| Communication Distance       | 1000 Meters                  |
| Parity                       | EVEN/ODD/NONE                |
| i ancy                       |                              |
| Data Bit                     | 8                            |

### **SDM120 Terminals**

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