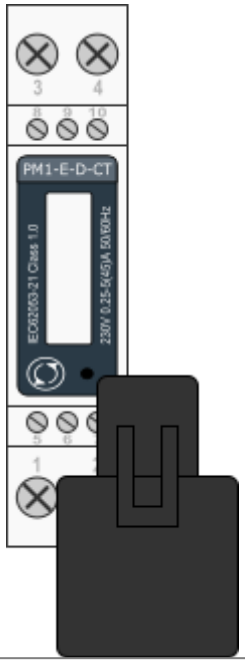
# Single phase power-sensor, CT

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




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

## Applications

- Digital multi-function power sensor for single phase networks

## Features

- DIN rail mounting with 50A current transformer (1-ph current transformer )
- Compact design in a single module 18mm wide
- Seal-able cover(phase and neutral terminals)

# General description

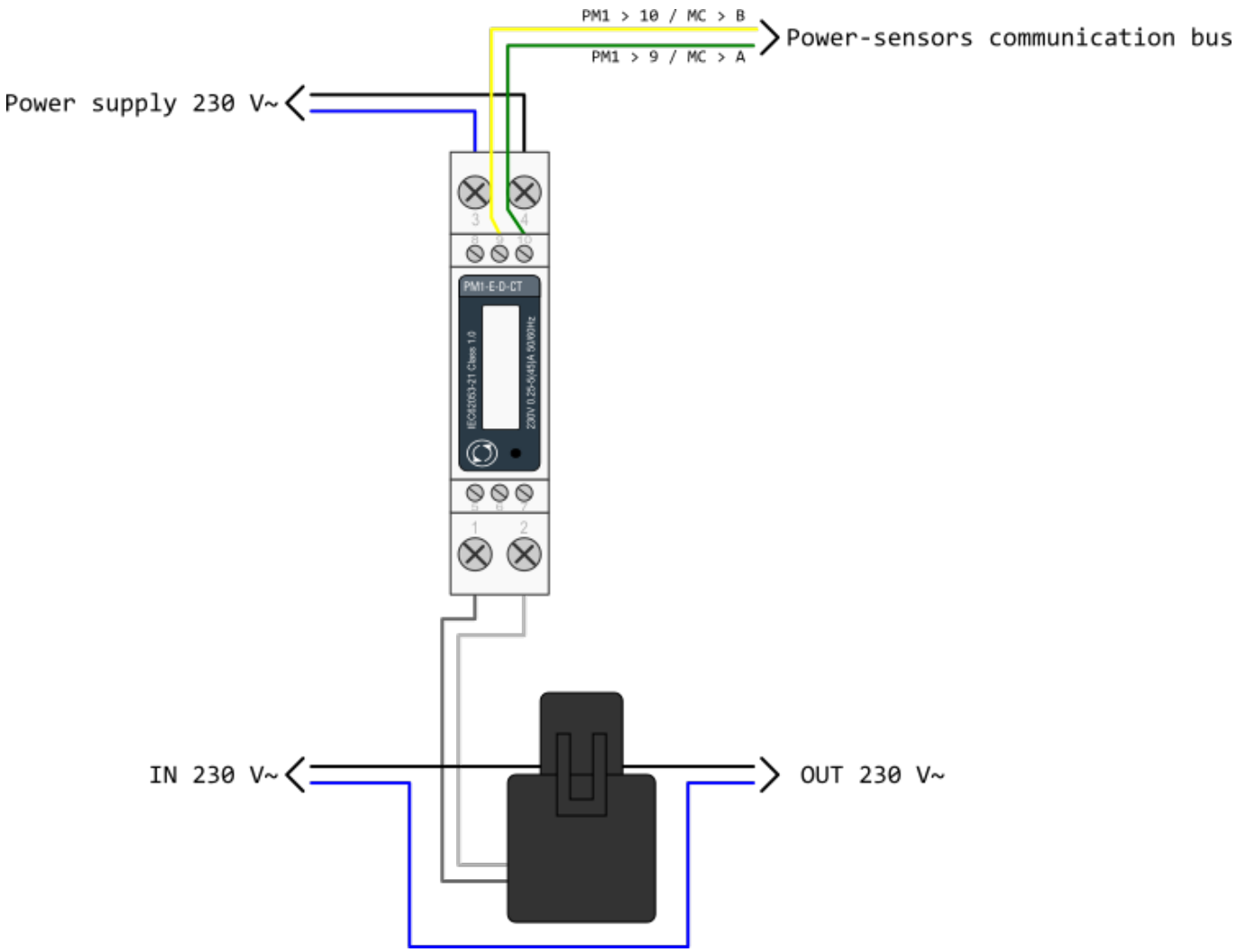
The PM1-E-D series is an advanced single phase energy monitoring solution with built-in configuration push button and LCD data displaying, particularly indicated for active energy and other parameters metering and for cost allocation. Housing for DIN-rail mounting,IP51 protection degree.

# 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% Ib-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 | ≤ 1% of Range Maximum |
| Reactive Power | ≤ 1% of Range Maximum |
| Reactive Energy (Varh) | Class 2 |
| Active Energy (Wh) | Class 1 |
| **Current transformer** | |
| Frequency | 50-60 Hz |
| Rated current | 50 A |
| Accuracy | from 20% to 120% of rated current |
| Phase angle | less than 2 degrees at 50% of rated current |
| Insulation voltage | 600 VAC |
| Maximum primary voltage | 5000 VAC (insulated conductor) |
| Dielectric strength | 2.5 kV/1mA/1min |
| Operating temperature | -15 to 60°C |
| Operating humidity | < 85 % |

| | |
|---|---|
| Case material | PC/UL94-V0 |
| Bobin | PBT |
| Core | Permalloy |
| Internal structure | Epoxy |
| Leads | UL 1015, Twisted pair, 22 AWG |
| **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 |
| Data Bit | 8 |
| Stop Bit | 1 |

# PM1-E-D-CT Terminals




hiq_pm1-e-d-ct_user_manual_2020_v1.0.pdf
hiq_pm1-e-d-ct_protocol_v1.2.pdf

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