



CVM-D41 DC mA

CVM-D41 DC mA, Digital multimeter DIN rail, 2 output relays

Code: M56638.

- > Protocol: Modbus/RTU
- > Módulos: 6
- > IP: 54
- > Communications: RS-485
- > N° relays: 2
- > Digital inputs: 2
- > Analog output: 1 (20 mA)
- > System: DC (Shunt)
- > Measurement Range (V): $\pm 150 \dots 1500$ Vdc
- > Measurement Range (A): 50 ... 600 mV
- > Parameters: V/A/kW/kWh dc
- > Mounting: DIN Rail

Description

The **CVM-D41 DC** is a digital power analyzer for installing on a DIN rail. Its screens are operated using buttons to display different electrical parameters in a DC network of up to 1500 VDC, such as voltage, current, power and energy (A·h).

This analyzer has the following key features:

- DIN rail installation.
- DC voltage measurement up to 1500VDC CATIII
- Shunt current measurement
- 2 digital inputs + 2 relay outputs + 1 analogue output (0/4...20 mA) or (0 / 2 ... 10 Vdc), depending on the model
- LED status indicator
- RS-485 communications (Modbus/RTU)
- Configuration via Power Studio SCADA

Application

Measurement and management of installations with a DC power supply:

- Industrial Applications
- Electric vehicle charging points
- Self-supply systems
- Solar photovoltaic Installations
- HVAC
- Industrial process control



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Digital instruments: Programmable DC measurement Central

Code: M56638.

Specifications

AC power supply

| | |
|-----------------------|---------------|
| Installation category | CAT III 300V |
| Consumption | 6 ... 18 VA |
| Frequency | 50/60 Hz |
| Nominal voltage | 100...270 V ~ |

DC power supply

| | |
|-----------------------|---------------|
| Installation category | CAT III 300 V |
| Consumption | 1.3 ... 2 W |
| Nominal voltage | 100...270 Vdc |

Mechanical characteristics

| | |
|----------------------------------|------------------------|
| Size (mm) width x height x depth | 108 x 117.43 x 74 (mm) |
| Weight (kg) | 0,284 |

Environmental characteristics

| | |
|--|----------------|
| Relative humidity (without condensation) | ≤ 93 % |
| Storage temperature | -25 ... +70 °C |
| Working temperature | -25 ... +70 °C |

Current measurement circuit

| | |
|-----------------------|--|
| Installation category | CAT III 1500 V |
| Consumption | < 1 VA |
| Nominal current (In) | Shunt: 50 / 60 / 75 / 100 / 150 / 200 / 250 / 300 / 400 / 600 mV |
| Allowable overload | 1.2 In continuous (max.1500 Vdc) |

Voltage measurement circuit

| | |
|---------------------------------------|-------------------------------------|
| Installation category | CAT III 1500 V |
| Consumption | < 1 VA |
| Nominal voltage | ± 150 / 300 / 600 / 1000 / 1500 Vdc |
| Maximum permanent measurement voltage | 1.2 Un continuous |

Standards

| | |
|--|---|
| Electrical safety, Maximum height (m) | 2000 |
| Electrical safety, Contamination level/class | Pollution resistance 2 |
| Standards | IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11, IEC 61010-1, IEC 61326-1, IEC 61010-2-030 |

User interface



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| | |
|---------------------------------------|--------------------------------------|
| Display type | LCD 5 digits |
| Digital inputs | |
| Input/output insulation | 4000 V ~ |
| Quantity | 2 |
| Type | Potential-free contact |
| Maximum short-circuit current | 3.3 mA dc |
| Maximum open circuit voltage | 17 V dc |
| Analogue outputs | |
| Quantity | 1 |
| Linearity | 0.5 % |
| Current mode, nominal range | 0 ... 20 mA, 4 ... 20 mA, 4-12-20 mA |
| Current mode: maximum load resistance | 350 Ω |
| Maximum internal voltage | 17 V dc |
| Digital relay outputs | |
| Quantity | 2 |
| Maximum current | 2.5 A |
| Electrical life | 1 x 10 ⁵ (250 V~ / 5A) |
| Maximum switching capacity | 625 VA |
| Measurement accuracy | |
| Phase current measurement | Class 0.5 |
| Active energy measurement (kWh) | Class 1 |
| Active power measurement (kW) | Class 1 |
| Phase voltage measurement | Class 0.5 |
| Serial communication | |
| Protocol | ModBus RTU |
| Technology / Type | RS-485 |

CVM-D41 DC

Programmable DC measurement device

| CODE | TYPE | System | Measurement Range (V) | Measurement Range (A) | N° relays | Digital inputs | Analog output | Módulos | Protocol |
|-------------------|---------------|------------|-------------------------------------|---|-----------|----------------|---------------|---------|------------|
| Multimeter | | | | | | | | | |
| M56638. | CVM-D41 DC mA | DC (Shunt) | ± 150 / 300 / 600 / 1000 / 1500 Vdc | 50 / 60 / 75 / 100 / 150 / 200 / 250 / 300 / 400 / 600 mV | 2 | 2 | 1 (20 mA) | 6 | Modbus/RTU |
| M566380040000 | CVM-D41 DC mA | DC (Shunt) | ± 150 / 300 / 600 / 1000 / 1500 Vdc | 50 / 60 / 75 / 100 / 150 / 200 / 250 / 300 / 400 / 600 mV | 2 | 2 | 1 (20 mA) | 6 | Modbus/RTU |



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Digital instruments: Programmable DC measurement Central

Code: M56638.

| CODE | TYPE | System | Measurement Range (V) | Measurement Range (A) | N° relays | Digital inputs | Analog output | Módulos | Protocol |
|---------------|--------------|------------|-------------------------------------|---|-----------|----------------|---------------|---------|------------|
| M5663A. | CVM-D41 DC V | DC (Shunt) | ± 150 / 300 / 600 / 1000 / 1500 Vdc | 50 / 60 / 75 / 100 / 150 / 200 / 250 / 300 / 400 / 600 mV | 2 | 2 | 1 (0 ... 10V) | 6 | Modbus/RTU |
| M5663A0040000 | CVM-D41 DC V | DC (Shunt) | ± 150 / 300 / 600 / 1000 / 1500 Vdc | 50 / 60 / 75 / 100 / 150 / 200 / 250 / 300 / 400 / 600 mV | 2 | 2 | 1 (0 ... 10V) | 6 | Modbus/RTU |



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Dimensions



Connections

