



## CVM-D41 DC mA

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

Code: CVMD41-001

- > 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

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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)

### Application

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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



## CVM-D41 DC mA

Digital instruments: Programmable DC meter

Code: CVMD41-001

### 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 %
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#### 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
Input impedance	> 1 MΩ
Nominal voltage	± 150 / 300 / 600 / 1000 / 1500 Vdc
Maximum permanent measurement voltage	1.2 Un continuous

#### Communications

Data bits	8
Stop bits (ModBus)	1-2
Parity	without, even, odd
Protocol	ModBus RTU
Speed	2400-4800-9600-19200-38400

#### Standards

Electrical safety, Maximum height (m)	2000
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## CVM-D41 DC mA

Digital instruments: Programmable DC meter

Code: CVMD41-001

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

Display type	LCD 5 digits
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### 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 <sup>5</sup> (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



## CVM-D41 DC mA

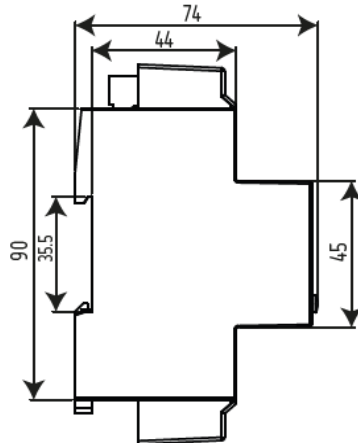
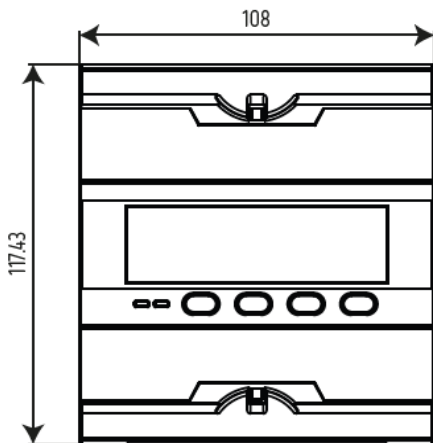
Digital instruments: Programmable DC meter

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CVM-D41 DC  
Programmable DC meter

CODE	TYPE	System	Measurement Range (V)	Measurement Range (A)	N° relays	Digital inputs	Analog output	Módulos	Protocol
CVMD41-001	CVM-D41 DC mA	DC (Shunt)	$\pm 150 / 300 / 600 / 1000 / 1500$ Vdc	50 / 60 / 75 / 100 / 150 / 200 / 250 / 300 / 400 / 600 mV	2	2	1 (20 mA)	6	Modbus/RTU
CVMD41-003	CVM-D41 DC mA	DC (Shunt)	$\pm 150 / 300 / 600 / 1000 / 1500$ Vdc	50 / 60 / 75 / 100 / 150 / 200 / 250 / 300 / 400 / 600 mV	2	2	1 (20 mA)	6	Modbus/RTU
CVMD41-002	CVM-D41 DC V	DC (Shunt)	$\pm 150 / 300 / 600 / 1000 / 1500$ Vdc	50 / 60 / 75 / 100 / 150 / 200 / 250 / 300 / 400 / 600 mV	2	2	1 (0 ... 10V)	6	Modbus/RTU
CVMD41-004	CVM-D41 DC V	DC (Shunt)	$\pm 150 / 300 / 600 / 1000 / 1500$ Vdc	50 / 60 / 75 / 100 / 150 / 200 / 250 / 300 / 400 / 600 mV	2	2	1 (0 ... 10V)	6	Modbus/RTU

### Dimensions



### Connections

