



## CVM-C10-FLEX-IN-485-I2

CVM-C10-FLEX-IN-485-I2, Power analyser panel 96 x 96 compatible with flexible clamps

Code: M55963.

- > Protocol: Modbus/RTU | BACnet
- > Communications: RS-485
- > Digital inputs: 2
- > Measuring current Channels: 4
- > Harmonics: 31
- > Input current: Rogowski
- > Mounting: Panel
- > Modules: 96 x 96

### Description

Compact and versatile power analyser, with 4-quadrant measurement (Consumption and Generation), suitable for High, Medium and Low-Voltage installations, since it can process high voltage:current transformation ratios of up to 2000 A. Measures current with flexible Rogowski sensors.

Capable of adapting to any type of electrical network topology, from single-phase lines, two-phase lines with or without neutral to three-phase lines with or without Neutral. The **CVM-C10-Flex** calculates the sensitivity of the measurement range scale automatically, according to the nominal value of the detected current, up to a full-scale of 2000 A. (Twice the full-scale value of measured current, 1000 A).

The flexible sensors feature a magnetic lock, which allows the sensors to be sealed. They are robust and can withstand frequent assembly and disassembly procedures, thanks to these magnetic lock.

Quick installation on distribution panels or switchboards of the unit, thanks to its flexible current sensors. Self-adjustment of the scale sensitivity. Does not require the current primary to be programmed. (1000 A by default, factory setting). Remote correction of errors associated with the incorrect connection of the unit to the electrical installation via remote communication systems (PowerStudio).

Display features and interface:

- Backlit keypad (capacitive)
- Analogue display for instantaneous parameters (power, maximum power reached and  $\cos \varphi$  or PF)
- Backlit display
- Cost by tariff

Operating time indicator for preventive maintenance.

- The unit has the following functions:
- Recording of the energy consumption from three different sources: network, generator set or photovoltaic energy generation system.
- Selection of tariffs with digital inputs. Perfect for calculating costs in three different work shifts.

### Application

- Management Systems that require roaming measuring points.
- Distribution panels or switchboards that cannot stop the installation of a measuring unit.



## CVM-C10-FLEX-IN-485-I2

Panel-mounted power analyser with flexible Rogowski sensors

Code: M55963.

### Specifications

#### AC power supply

|                       |                      |
|-----------------------|----------------------|
| Installation category | CAT III 300 V        |
| Consumption           | 4 ... 6 VA           |
| Frequency             | 50 ... 60 Hz         |
| Nominal voltage       | 95 ... 240 V ~ ± 10% |

#### DC power supply

|                       |                       |
|-----------------------|-----------------------|
| Installation category | CAT III 300 V         |
| Consumption           | 2 ... 6 W             |
| Nominal voltage       | 105 ... 272 Vdc ± 10% |

#### Mechanical characteristics

|                                  |                               |
|----------------------------------|-------------------------------|
| Size (mm) width x height x depth | 96 x 96 x 60.9 (mm)           |
| Envelope                         | Self-extinguishing V0 plastic |
| Fastening                        | Panel                         |
| Weight (kg)                      | 0,268                         |

#### Environmental characteristics

|  |   |
|--|---|
| Protection class                         | IP 51 (Front), IP 64 (with accessory), IP 21 (rear) |
| Relative humidity (without condensation) | 5 ... 95%   |
| Storage temperature                      | -10... +50 °C                                       |
| Working temperature                      | -5 ... +45 °C                                       |

#### Standards

|                                       |  |
|---------------------------------------|--|
| Certifications                        | UL, VDE  |
| Electrical safety, Maximum height (m) | 2000   |
| Standards                             | UNE EN 61010, UNE EN 61000-6-3, UNE EN 61000-6-1, IEC 664, VDE 0110, UL 94, BS EN 61000-6-2, BS EN 61000-6-4 |

#### Current measurement circuit

|                                   |                 |
|-----------------------------------|-----------------|
| Installation category             | CAT III 300 V   |
| Nominal current (In)              | .../100 mV c.a  |
| Neutral current measurement       | .../100 mV~     |
| Phase current measuring range     | 0.2 ... 200% In |
| Maximum input current consumption | 0,004 VA        |
| Maximum pulse current             | 2 In            |
| Minimum current measurement       | 0,2 mV~         |

#### Voltage measurement circuit



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|                                      |                       |
|--------------------------------------|-----------------------|
| Installation category                | CAT III 300 V         |
| Frequency measuring range            | 45 ... 65 Hz          |
| Voltage measuring range              | 5 ...120% Un          |
| Nominal voltage                      | 300V Ph-N, 520V Ph-Ph |
| Minimum measurement voltage (Vstart) | 15 V                  |

### User interface

|              |                |
|--------------|----------------|
| LED          | 3 LED          |
| Keyboard     | 3 keys         |
| Display type | LCD Custom COG |

### Digital inputs

|                         |                            |
|-------------------------|----------------------------|
| Input/output insulation | Optoisolated               |
| Quantity                | 4                          |
| Type                    | NPN Potential-free contact |

### Measurement accuracy

|                           |   |
|---------------------------|---|
| Phase voltage measurement | 0.5% ± 1 digit (Without sensors), ± 0.5% + 1 decimal (With sensors) |
|---------------------------|---|

### Serial communication

|                   |                    |
|-------------------|--------------------|
| Protocol          | ModBus/RTU, BACnet |
| Technology / Type | RS-485 / BACnet    |

### CVM-C10-Flex

Power analyser 96 x 96 panel with flexible clamps

| CODE    | TYPE                   | Input current | Digital inputs | Communications | Protocol            |
|---------|------------------------|---------------|----------------|----------------|---------------------|
| M55963. | CVM-C10-FLEX-IN-485-I2 | Rogowski      | 2              | RS-485         | Modbus/RTU   BACnet |

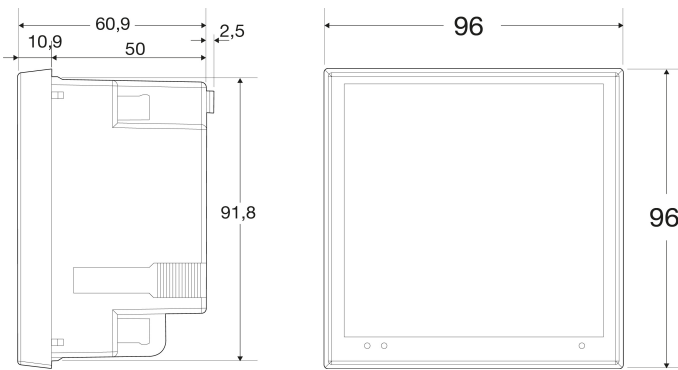


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## Dimensions



## Connections

