



## CVM-MINI-HAR-ITF-RS485-C2

CVM-MINI-HAR-ITF-RS485-C2, Power analyzer

Code: M52031.

- > Protocol: Modbus/RTU
- > Insulated input: Yes
- > Communications: RS-485
- > Transistor output: 2
- > Harmonics: U e I (15)
- > Input current: .../5 A | .../1 A
- > Mounting: DIN rail

### Description

Three-phase power analyzer (balanced and unbalanced), assembly on DIN rail, with a very compact size, and 4-quadrant measurement.

Other features include:

- Current measurement .../5 or .../1 A or .../250 mA, .../333 mV
- DIN rail format of only 3 modules
- Assembly on 72 x 72 mm panel with adapter front panel
- RS-485 Communications (Modbus-RTU) depending on model
- It features two transistor outputs (programmable)
- With ITF technology: galvanic insulation protection, depending on the type
- Selection of parameters to display
- Selection of the default page
- Universal power supply (optional)
- Sealable

### Application

- Control application on switchboards and low and medium voltage connection points, where an analyzer must be installed on a DIN rail due to space restrictions.
- Alarm control. Maximum value, minimum value and programmable delay.
- Control of active or reactive energy using the impulse output.
- Instantaneous data capture, maximum and minimum values of the electrical parameters measured.



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### Specifications

#### AC power supply

|                 |                       |
|-----------------|-----------------------|
| Consumption     | 3 VA                  |
| Frequency       | 50...60 Hz            |
| Nominal voltage | 230 Vc.a.(-15...+10%) |

#### Mechanical characteristics

|                                  |                               |
|----------------------------------|-------------------------------|
| Size (mm) width x height x depth | 53 x 85 x 85 (mm)             |
| Envelope                         | Self-extinguishing V0 plastic |
| Fastening                        | DIN rail 46227                |
| Weight (kg)                      | 0,2                           |

#### Environmental characteristics

|  |                                  |
|--|----------------------------------|
| Protection class                         | IP 51 (Front), IP 31 (unmounted) |
| Relative humidity (without condensation) | 5...95%                          |
| Working temperature                      | -10...+50 °C                     |

#### Standards

|  |  |
|--|--|
| Certifications                           | CE, UL, VDE  |
| Electrical safety, Maximum height (m)    | 2000   |
| Electrical safety, Installation category | CAT III 300V / 520V, IEC 61010   |
| Standards                                | IEC 664, VDE 0110, UL 94, IEC 801, IEC 348, IEC 571-1, EN 61000-6-3, EN 61000-6-1, EN 61010-1, EN 61000-4-11, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 55011 |

#### Current measurement circuit

|                                   |                |
|-----------------------------------|----------------|
| Nominal current (In)              | In/5A , In/1 A |
| Allowable overload                | 1.2 In         |
| Permanent overload                | 1.2 In         |
| Maximum input current consumption | 0,9 VA         |

#### Voltage measurement circuit

|                                   |                       |
|-----------------------------------|-----------------------|
| Frequency measuring range         | 45 ... 65 Hz          |
| Voltage measuring range           | 45 ... 65 Hz          |
| Nominal voltage                   | 300V Ph-N, 520V Ph-Ph |
| Maximum input voltage consumption | 0,7 VA                |

#### Communications

|                    |        |
|--------------------|--------|
| Fieldbus           | RS-485 |
| Stop bits (ModBus) | 1-2    |



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|                   |                           |
|-------------------|---------------------------|
| Parity            | without, even, odd        |
| Protocol          | ModBus RTU                |
| Speed             | 1200-2400-4800-9600-19200 |
| Peripheral number | 0...255                   |

### Electrical safety

|            |   |
|------------|---|
| Insulation | Double-insulated electric shock protection class II (IEC 61010-1) |
|------------|---|

### Digital transistor outputs

|                   |           |
|-------------------|-----------|
| Pulse width       | 100 ms    |
| Quantity          | 2         |
| Type              | NPN       |
| Maximum frequency | 5 imp / s |
| Maximum current   | 50 mA     |
| Maximum voltage   | 24 Vdc    |

### Measurement accuracy

|                           |                |
|---------------------------|----------------|
| Phase voltage measurement | 0.5% ± 1 digit |
| Current harmonics (THD)   | 15             |
| Voltage harmonics (THD)   | 15             |

CVM-MINI-MC units require efficient MC series transformers, which are not included in the price. CVM-MINI-xx-ETH units are only available with a 230 Vac power supply



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### Dimensions

