# Circutor

# CVM-MINI-MC-ITF-BACnet-C2

CVM-MINI-MC-ITF-BACnet-C2, Power analyzer

Code: M520H1.    DESCATALOGADO

> Protocol: BACnet
> Insulated input: Yes
> Communications: RS-485
> Transistor output: 2
> Input current: .../250 mA
> 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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Three-phase power analyzer, assembly on DIN rail

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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% |
| Operating temperature | -10...+50 °C |

### Standards

| | |
|---|---|
| Certifications | 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 61000-6-4, EN 61000-6-2, EN 61010-1, EN 61000-4-11, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 55012 |

### Current measurement circuit

| | |
|---|---|
| Nominal current (In) | In/250 mA |
| Phase current measuring range | 0,2%...120% (ITF) |
| Permanent overload | 1.2 In |
| Maximum input current consumption | 0,9 VA |

### Voltage measurement circuit

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

### Electrical safety

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

### Digital transistor outputs

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# CVM-MINI-MC-ITF-BACnet-C2

Three-phase power analyzer, assembly on DIN rail

Code: M520H1.

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

## Measurement accuracy

| | |
|---|---|
| Current measurement sensors | Indirect measurement with external transformers |
| Voltage measurement sensors | Direct voltage or indirect voltage with transformer |
| Power factor measurement | 0,5...1 |
| Phase voltage measurement | 0.5% ± 1 digit |

## CVM-MINI

Power analyzer, three-phase DIN rail

| CODE | TYPE | Input current | Transistor output | Communications | Protocol |
|---|---|---|---|---|---|
| M52000. | CVM-MINI | | | | |
| M52011. | CVM MINI-ITF-C2 | | | | |
| M52071. | CVM MINI-MC-ITF-C2 | .../250 mA | 2 | | |
| M52021. | CVM-MINI-ITF-RS485-C2 | .../5 A \| .../1 A | 2 | RS-485 | Modbus/RTU |
| M52081. | CVM-MINI-MC-ITF-RS485-C2 | .../250 mA | 2 | RS-485 | Modbus/RTU |
| M52031. | CVM-MINI-HAR-ITF-RS485-C2 | .../5 A \| .../1 A | 2 | RS-485 | Modbus/RTU |
| M520J1. | CVM-MINI-ITF-ETH-C2 | | | | |
| M520L1. | CVM MINI-MC-ITF-ETH-C2 | | | | |
| M520F1. | CVM-MINI-ITF-BACnet-C2 | .../5 A \| .../1 A | 2 | RS-485 | BACnet |
| M520H1. | CVM-MINI-MC-ITF-BACnet-C2 | .../250 mA | 2 | RS-485 | BACnet |
| M52091. | CVM-MINI-ITF-LonWorks-C2 | .../5 A \| .../1 A | 2 | LonWorks | LonTalk (ISO/IEC 14908, ANSI/EIA 7091) |
| M520810000V00 | CVM-MINI-mV-ITF-RS485-C2 | | | | |

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

# CVM-MINI-MC-ITF-BACnet-C2

Three-phase power analyzer, assembly on DIN rail

Code: M520H1.

## Dimensions