CVM-NET-MC-ITF-485-C2

CVM-NET-MC-ITF-485-C2, Power analyzer

Code: M54B31.

> Protocol: Modbus/RTU
> Communications: RS-485
> Transistor output: 2
> Input current: .../250 mA
> Mounting: DIN rail

Description

CVM NET is a Power Analyzer for measuring balanced or unbalanced single and three-phase networks. It has been specifically designed for measuring up to 230 electrical parameters and for transmitting this data through the RS-485 communication bus with the Modbus/RTU protocol to the supervision SCADA.

Its main features are:

- DIN rail format of only 3 modules
- Mounted on 72 x 72 mm panel, with adapter front panel (M5ZZF1)
- Measures the current with ... / 5 A and .../250 mA external transformers (**MC** model), .../333 mV
- Possibility of measuring Medium and Low Voltage networks
- RS-485 communication (Modbus RTU)
- Compatible with **PowerStudio / PSS / PSSDeluxe software**
- 2 programmable digital outputs
- 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.

CVM-NET-MC-ITF-485-C2

Three-phase power analyzer, assembly on DIN rail - without display

Code: M54B31.

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	52.5 x 85 x 67.9 (mm)
Envelope	Self-extinguishing V0 plastic
Fastening	DIN rail 46227
Weight (kg)	0,16

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/250 mA
Phase current measuring range	0,2...120% / 2...120%
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)

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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

Current measurement sensors	External transformers
Voltage measurement sensors	Direct voltage
Power factor measurement	0,5...1
Phase voltage measurement	0.5% ± 1 digit

Serial communication

Technology / Type	RS-485

CVM-NET
Power analyer, three-phase DIN rail

CODE	TYPE	Input current	Transistor output	Communications	Protocol
M54B21.	CVM-NET-ITF-485-C2	.../5 A	2	RS-485	Modbus/RTU
M54B31.	CVM-NET-MC-ITF-485-C2	.../250 mA	2	RS-485	Modbus/RTU
M54B310000V00	CVM-NET-333-485-C2	.../333 mV	2	RS-485	Modbus/RTU

The CVM-NET-MC units require the use of efficient transformers of the MC series, which are not included in the price.

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Dimensions

Connections