CVM-E3-MINI-MC-485-IC

CVM-E3-MINI-MC-485-IC, N rail power analyzer

Code: M56424.

> Protocol: Modbus/RTU | BACnet
> Communications: RS-485
> Transistor output: 1
> Digital inputs: 1
> Harmonics: 31
> Power supply (Vac): 207...253 Vac
> Input current: .../250 mA
> Mounting: DIN rail

Description

Three-phase power analyzer (balanced and unbalanced) for mounting on DIN rail, very compact, with measurements in 4 quadrants.

Other features:

- Current measurement .../5 or .../1 A or .../250 mA or Rogowski type sensors
- With ITF technology: ITF galvanic insulation protection
- DIN rail with only 3 modules
- High-contrast backlit display
- 72 x 72 mm panel mounting with front adapter
- RS-485 communication (Modbus/RTU up to 19.2 kbps) (Bacnet up to 19.2 kbps)
- One transistor output (programmable)
- One digital input for selecting tariff or logic states
- Sealable terminal cover
- Harmonic display (V, A) up to 31°

Application

- Control application in low- and medium-voltage distribution panels and switchboards where it is necessary to place an analyzer on the DIN rail due to problems of space.
- Alarm control. Maximum value, minimum value and programmable delay.
- Control of active or reactive energy by impulse output.
- Capture of maximum and minimum instantaneous data of electrical parameters measured.

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Specifications

AC power supply

Installation category	CAT III 300 V
Consumption	4 VA
Frequency	50...60 Hz
Nominal voltage	207...253 Vc.a.

Mechanical characteristics

Size (mm) width x height x depth	52.5 x 118 x 74 (mm)
Envelope	Self-extinguishing V0 plastic
Differential current measurement	min. 2,5 mm2
Fastening	DIN rail
Weight (kg)	0,29

Environmental characteristics

Protection class	IP 30 / Front: IP 40
Relative humidity (without condensation)	5...95%
Storage temperature	-10 ... +50 °C
Working temperature	-5 ... +45 °C

Current measurement circuit

Installation category	CAT III 300 V
Nominal current (In)	.../0,250 A
Phase current measuring range	2...100% de In
Maximum input current consumption	0,9 VA
Minimum current measurement	0,2 % In

Voltage measurement circuit

Installation category	CAT III 300 V
Input impedance	400 kΩ
Frequency measuring range	45...65 Hz
Nominal voltage	300V Ph-N, 520V Ph-Ph
Minimum measurement voltage (Vstart)	11 V Ph-N

Standards

Electrical safety, Maximum height (m)	2000
Standards	IEC 61010-1, IEC 61010-2-030, IEC 61326-1, IEC 61557-12 , UL94

User interface

LED	2 LED

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Keyboard	3 keys
Display type	LCD Custom COG

Digital inputs

Input/output insulation	Optoisolated
Quantity	1
Type	NPN Potential-free contact

Digital transistor outputs

Pulse width	30...500 ms (Programmable)
Type	NPN
Maximum frequency	16 imp / s
Maximum current	50 mA
Maximum voltage	24 Vdc

Measurement accuracy

Frequency measurement	0,50%
Phase current measurement	0,5 % ± 1 digit (10% ≤ I ≤ 100% In)
Reactive energy measurement (kvarh)	Class 2 (2 ... 100% In)
Reactive power measurement (kvar)	class 2 (2 ... 100% In)
Apparent power measurement (kVA)	2 % ±2 digits (2 ... 100% In)
Active energy measurement (kWh)	Class 1 (2 ... 100% In)
Active power measurement (kW)	2 % ±2 digits (2 ... 100% In)
Phase voltage measurement	0.5% ± 1 digit

Serial communication

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

CVM-E3-MINI
Power analyzer, three-phase DIN rail

CODE	TYPE	Input current	Transistor output	Digital inputs	Communications	Protocol
M56414.	CVM-E3-MINI-ITF-485-IC	.../5 A | .../1 A	1	1	RS-485	Modbus/RTU | BACnet
M56424.	CVM-E3-MINI-MC-485-IC	.../250 mA	1	1	RS-485	Modbus/RTU | BACnet
M56454.	CVM-E3-MINI-FLEX-485-IC	Rogowski	1	1	RS-485	Modbus/RTU | BACnet

"Built-in wireless communication on all WiEth models for configuration via free app (MyConfig) RS-485 models, possibility of switching power supply Consult additional benefits"

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Dimensions

Connections