





CVM-E3-MINI-ITF-485-IC, Power analyzer

Code: M56414.

> Protocol: Modbus/RTU | BACnet > Communications: RS-485

> Transistor output: 1

> Digital inputs: 1

> Harmonics: 31

> Power supply (Vac): 207...253 Vac > Input current: .../5 A | .../1 A

> 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:

- $\circ~$  Current measurement .../5 or .../1 A or .../250 mA or Rogowski type sensors
- o With ITF technology: ITF galvanic insulation protection
- $\circ$  DIN rail with only 3 modules
- High-contrast backlit display
- o 72 x 72 mm panel mounting with front adapter
- o 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.
- o Alarm control. Maximum value, minimum value and programmable delay.
- o Control of active or reactive energy by impulse output.
- o Capture of maximum and minimum instantaneous data of electrical parameters measured.









Three-phase power analyzer for DIN rail

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## **Specifications**

Installation category	CAT III 300 V	CAT III 300 V		
Consumption	4 VA	4 VA		
Frequency	5060 Hz	5060 Hz		
Nominal voltage	207253 Vc.a.	207253 Vc.a.		
Mechanical characteristics				
Size (mm) width x height x depth	52.5 x 118 x 74 (mm)	52.5 x 118 x 74 (mm)		
Envelope	Self-extinguishing V0 plastic	Self-extinguishing V0 plastic		
Differential current measurement	min. 2,5 mm2	min. 2,5 mm2		
Cable gauge at power supply terminals	1 mm2 (min.)	1 mm2 (min.)		
Cable gauge at voltage terminals	mín. 1 mm²	mín. 1 mm²		
Fastening	DIN rail	DIN rail		
Weight (kg)	0,38			
invironmental characteristics				
Protection class	IP 30 / Front: IP 40	IP 30 / Front: IP 40		
Relative humidity (without condensation)	595%			
Storage temperature	-10 +50 °C			
Working temperature	-5 +45 °C	-5 +45 °C		
urrent measurement circuit				
Installation category	CAT III 300 V	CAT III 300 V		
Nominal current (In)	/5 A ó/1 A	/5 A ó/1 A		
Phase current measuring range	2120% de In	2120% de In		
Maximum input current consumption	0,9 VA	0,9 VA		
Minimum current measurement	0,2 % In			
Oltage measurement circuit				
Installation category	CAT III 300 V	CAT III 300 V		
Input impedance	400 kΩ	400 kΩ		
Frequency measuring range	4565 Hz	4565 Hz		
Voltage measuring range	4565 Hz	4565 Hz		
Nominal voltage	300V Ph-N, 520V Ph-Ph	300V Ph-N, 520V Ph-Ph		
Maximum input voltage consumption	0,15 VA	0,15 VA		
		11 V Ph-N		



Communications





Three-phase power analyzer for DIN rail

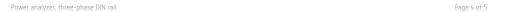
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Fieldbus (BACnet)	MS/TP
Fieldbus (ModBus)	RS-485
Stop bits (BACnet)	1
Stop bits (ModBus)	1-2
Parity (BACnet)	non
Parity	without, even, odd
Protocol	ModBus/RTU, BACnet
Speed	ModBus RTU: 9600-19200 bps / BACnet: 9600-19200 bps (38400-57600-11520) bps: Available on devices with software V2.xx)
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
Keyboard	3 keys
Display type	LCD Custom COG
Digital inputs	
Input/output insulation	Optoisolated
Quantity	1
Туре	NPN Potential-free contact
Digital transistor outputs	
Pulse width	30500 ms (Programmable)
Туре	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
Reactive energy measurement (kvarh)	Class 2
Reactive power measurement (kvar)	class 2
Apparent power measurement (kVA)	0.5 % ±2 digits
Active energy measurement (kWh)	I < 0,1 In (Class 1) / I > 0,1 In (Class 0,5)
Active power measurement (kW)	0.5 % ±2 digits



Phase voltage measurement

 $0.5\% \pm 1 \, digit$ 







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#### CVM-E3-MINI

Power analyzer, three-phase DIN rail

CODE	ТҮРЕ	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

Bluetooth is built into every WiEth model, which can be set up using the free MyConfig app. RS-485 models, option to switch power supplies. Consult additional services



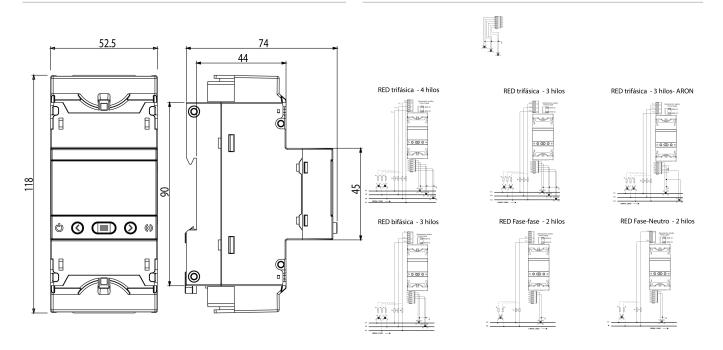




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Connections Dimensions





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