



CVM-C11-ITF-IN-485-ICT2

CVM-C11-ITF-IN-485-ICT2, Power analyzer 96 x 96

Code: M58541.

- > Protocol: Modbus/RTU | BACnet
- > Communications: RS-485
- > Transistor output: 2
- > N° relays: 2
- > Digital inputs: 2
- > Measuring Channels: 4
- > Harmonics: 31
- > Power supply: 100...270 Vac/dc
- > Input current: .../5 A | .../1 A
- > Mounting: Pannel
- > Modules: 96 x 96

Description

The **CVM-C11** is a power analyzer for a panel (96 x 96 mm) with power logging. Ideal for analyzing electrical and consumption quality variables, such as THD% for voltage and current, as well as individual harmonics for each phase up to the 31st. The inclusion of neutral current measurement lets users detect any imbalance, as well as detect overloads in the neutral conductor. Compact and versatile with measurements in 4 quadrants (consumption and generation), suitable for medium- and low-voltage installations.

Display and interface characteristics:

- User-defined parameter display.
- Backlit screen
- On-screen graphic display of instantaneous active power
- On-screen graphic display of all quadrants (Q1, Q2, Q3, Q4).
- On-screen numerical indication of the value of $\cos \varphi$ or PF.
- On-screen indication of the status of outputs, inputs and/or active tariff.
- LED alarm indicator
- Costs, kg of CO₂ emitted and operating time per tariff

Application

- Discrimination of power consumption into three tariffs. Ideal for determining consumption during three different work shifts or from three different energy sources (grid, generator and photovoltaic generation), using the digital inputs.
- Generation of an impulse signal related to cost, kg of CO₂ emitted or proportional to energy consumption or generation.
- Alarm control (2 relay outputs + 2 digital outputs) for any instantaneous parameter, whether measured or calculated. Adjustable based on maximum/minimum value, hysteresis (%), NO/NC, connection/disconnection delay and interlocks.



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Power analyzer for panel

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Specifications

AC power supply

| | |
|-----------------------|-----------------------|
| Installation category | CAT III 300 V |
| Consumption | 2 ... 5 VA |
| Frequency | 50 ... 60 Hz |
| Nominal voltage | 100 ... 270 V ~ ± 10% |

DC power supply

| | |
|-----------------------|-----------------------|
| Installation category | CAT III 300 V |
| Nominal voltage | 100 ... 270 Vdc ± 10% |

Mechanical characteristics

| | |
|----------------------------------|-------------------------------|
| Size (mm) width x height x depth | 96 x 96 x 67.2 (mm) |
| Envelope | Self-extinguishing V0 plastic |
| Fastening | Panel |
| Weight (kg) | 0,363 |

Environmental characteristics

| | |
|--|----------------------|
| Protection class | IP 54 (Front), IK 08 |
| Relative humidity (without condensation) | 5 ... 95% |
| Storage temperature | -25 ...+75 °C |
| Working temperature | -25 ...+70 °C |

Standards

| | |
|--|--|
| Certifications | UL 94 |
| Electrical safety, Maximum height (m) | 2000 |
| Electrical safety, Installation category | CAT III 300 V |
| Electrical safety, Contamination level/class | Pollution resistance 2 |
| Standards | EN IEC 61326-1, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11, EN 61010-2-030, EN IEC 61557-12, EN 61010-1, UNE-EN 60068-2-2, UNE-EN 60068-2-1, UNE-EN 60068-2-78, UL 94 |

Current measurement circuit

| | |
|-----------------------------|-----------------------|
| Installation category | CAT III 300 V |
| Nominal current (In) | 5A - .../5A , .../1 A |
| Minimum current measurement | 10 mA |

Voltage measurement circuit

| | |
|-----------------------|---------------|
| Installation category | CAT III 300 V |
| Input impedance | > 1.7 MΩ |



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| | |
|--------------------------------------|-----------------------|
| Frequency measuring range | 45 ... 65 Hz |
| Nominal voltage | 230V Ph-N, 380V Ph-Ph |
| Minimum measurement voltage (Vstart) | 10 V ~ |
| Maximum value | 300 VF-N / 520 VF-F |

User interface

| | |
|--------------|----------------|
| LED | 2 LED |
| Keyboard | 3 keys |
| Display type | LCD Custom COG |

Digital inputs

| | |
|-------------------------|--------|
| Input/output insulation | 2000 V |
| Quantity | 2 |
| Type | NPN |

Digital relay outputs

| | |
|-----------------------------------|---------------------------|
| Electrical life (at maximum load) | 60x10 ³ cycles |
| Mechanical life | 10x10 ⁶ cycles |
| Maximum switching capacity | 625 VA / 75 W (AC1) |

Digital transistor outputs

| | |
|-------------------|-------------------------------|
| Pulse width | 30 ms a 400 ms (Programmable) |
| Quantity | 2 |
| Type | NPN |
| Maximum frequency | 16 imp / s |
| Maximum current | 50 mA |
| Maximum voltage | 24 Vdc |

Measurement accuracy

| | |
|-----------------------------------|----------------------|
| Phase current measurement | 0.2% (1 ... 120% In) |
| Reactive power measurement (kvar) | 1% ± 2 digit |
| Active power measurement (kW) | 0.5% ± 2 digit |
| Phase voltage measurement | 0.2% (5 ...120% Un) |

Serial communication

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

CVM-C11

Power analyzer, panel mounted 96 x96



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| CODE | TYPE | Measuring Channels | Input current | Transistor output | Nº relays | Digital inputs | Communications | Protocol | Harmonics | Power supply |
|---------|-----------------------------|--------------------|----------------------|-------------------|-----------|----------------|----------------|------------------------|-----------|------------------|
| M58531. | CVM-C11-ITF-IN-ETH-ICT2 | 4 | .../5 A .../1 A | 2 | 2 | 2 | Ethernet | Modbus/TCP BACnet | 31 | 100...270 Vac/dc |
| M58541. | CVM-C11-ITF-IN-485-ICT2 | 4 | .../5 A .../1 A | 2 | 2 | 2 | RS-485 | Modbus/RTU BACnet | 31 | 100...270 Vac/dc |
| M58581. | CVM-C11-MC-IN-485-ICT2 | 4 | .../250 mA | 2 | 2 | 2 | RS-485 | Modbus/RTU BACnet | 31 | 100...270 Vac/dc |
| M58561. | CVM-C11-FLEX-IN-485-ICT2 | 4 | 100 mV/kA | 2 | 2 | 2 | RS-485 | Modbus/RTU BACnet | 31 | 100...270 Vac/dc |
| Kits | | | | | | | | | | |
| M58562. | CVM-C11-FLEX+3 MFC-FLEX-80 | | | | | | | | | |
| M58563. | CVM-C11-FLEX+3 MFC-FLEX-125 | | | | | | | | | |
| M58564. | CVM-C11-FLEX+4 MFC-FLEX-80 | | | | | | | | | |
| M58565. | CVM-C11-FLEX+4 MFC-FLEX-125 | | | | | | | | | |

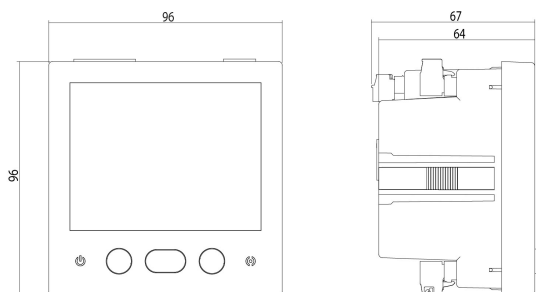


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Dimensions



Connections

Red Trifásica 4 hilos 4-wire three-phase network

