CVMk2-ITF-402

CVM k2-ITF-402, Power analyzer

Code: M54402. **CONSULTAR DISPONIBILIDAD**

> Protocol: Modbus/RTU

> Communications: RS-485

> Class in power: 0.2

Description

Three-phase power analyzer (balanced and unbalanced networks), assembly on panels or DIN rails, with a graphical display, with 4-quadrant measurement.

Other features include:

- Class 0.2 or 0.5 power and energy
- Measurement of power quality events (guaranteeing the power supply of the unit by means of a UPS system, battery, etc.)
- Current measurement .../5 or .../1 A
- Measurement of the neutral current with a transformer
- Rating of consumed and generated energy (up to 9 tariffs)
- RS-485 Modbus/RTU communication
- Possibility of expansion (up to 3 modules)
- Backlit VGA graphic screen
- Instantly shows electrical parameters, maximum and minimum values with date and time
- Consumed and generated energy meter up to 100 GW·h
- Universal power supply as standard
- With ITF technology: galvanic insulation protection

Application

- Control application for general distribution switchboards and low-, medium- and high-voltage connection points
- Alarm station, featuring voltage-free digital inputs
- Submetering station: impulse meter for other services (gas, water, steam etc.) via the digital inputs
- Measurement transducer: possibility of associating instantaneous parameters with one of the available analogue outputs (0 to 20 mA / 4 to 20 mA)
- Unit for recording the instantaneous, maximum and minimum parameters, with date and time, via the memory expansion card
- Power quality analyzer: Harmonic decomposition, up to the 50th order harmonic, asymmetries, flicker, unbalances, overvoltages, gaps, interruptions, etc.

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Specifications

AC power supply

Installation category	CAT III 300/520 Vac (IEC 61010)
Consumption	<30 VA
Frequency	50...60Hz
Nominal voltage	85...265 Vc.a. (-15...+10%)

DC power supply

Consumption	<25 W
Nominal voltage	100...300 Vdc

Mechanical characteristics

Size (mm) width x height x depth	144 x 144 x 116 (mm)
Envelope	Self-extinguishing V0 plastic
Weight (kg)	0,82

Environmental characteristics

Protection class	IP 51 (Front), IP 20 (rear)
Relative humidity (without condensation)	5...95%
Storage temperature	-20...+65 °C
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, IEC 62053-22

Current measurement circuit

Nominal current (In)	In/5A, In/1A
Primary current measurement	Programmable < 30000 A
Phase current measuring range	1...120% In (In = 5 A)
Permanent overload	1.2 In
Maximum input current consumption	<0,45 VA (.../5 , .../1)
Maximum pulse current	100 A
Minimum current measurement	40 mA

Voltage measurement circuit

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Installation category	CAT III 300/520 V (EN-61010)
Frequency measuring range	45...65 Hz
Voltage measuring range	5 ...120% Un
Nominal voltage	300V Ph-N, 520V Ph-Ph
Maximum input voltage consumption	<0,6 VA
Minimum measurement voltage (Vstart)	10 V~

Communication Network

Protocol	ModBus/RTU, ModBus/TCP
Technology / Type	Ethernet

Electrical safety

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

Digital inputs

Consumption (per input)	<0,5 W
Minimum signal width	40 ms
Operating voltage	24 Vdc ± 20 %

Analogue outputs

Current mode, nominal range	0-20 mA/4-20 mA
Current mode: maximum load resistance	300 Ω
DAC resolution	4000 points
Response time	< 2 s

Digital transistor outputs

Type	Optocoupler
Maximum current	100 mA
Maximum resistance RON	25 Ω
Maximum voltage	150 Vdc / 250 V~

Measurement accuracy

Power factor measurement	0,5...1
Phase voltage measurement	± 0,2% ± 2 (20 ... 120% Un)

Serial communication

Protocol	ModBus/RTU
Technology / Type	RS-485

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Connections