

CAVA

Single-phase power quality analyzers



Description

The **CAVA** series analyzers are measurement equipment that can analyze and record the main supply quality parameters of an electricity network. There are three types with different measurement capacities. The basic performance features are stated next:

- Analysis of 100% of the voltage and current cycles
- Optional measurement of currents between 2 A and 10 000 A with different current sensing clips
- Large storage capacity
- Easy installation and programming
- Programming and extraction of data with a PC
- PowerVision** software used to analyse measurements.

Application

The **CAVA** single-phase analyzer has been specially designed for the intake of LV measurements during long periods of time, with the purpose of determining the supply quality existing in the measurement point (voltage, flicker, harmonics, etc). It is the perfect product to analyze the difference in voltage between the start and end of distribution lines. Its easy installation and the user-oriented **PowerVision** software can be used to analyze any information and apply the quality standards (for ex., **EN-50160**) to the measurements taken to determine the degree of quality.

Characteristics

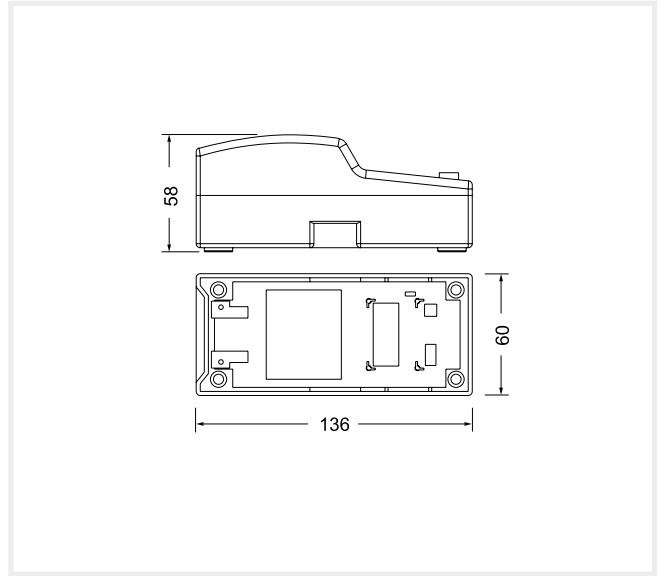
Power circuit	
Power supply (*) (**)	230 Vac
Voltage tolerance	- 15 % / + 15 %
Frequency	50 - 60 Hz
Consumption	3 V·A
(*) The power supply voltage is taken during the measurement	
(**) Other voltages, on demand	
Current measurement circuit	
With current sensing clip:	
CP-2000-200	20 ... 2 000 Aac (scale 2 000 A) 2 ... 200 Aac (scale 2 000 A)
CPR-1000	10 ... 1 000 Aac
CPR-500	5 ... 500 Aac
CP-200 (M1-U)	2 ... 200 Aac
CP-100 (M1-U)	1 ... 100 Aac
CP-5	50 mA ... 5 Aac
C-FLEX 2000/200-45	200 ... 2,000 Aac
C-FLEX 2000/200-80	200 ... 2,000 Aac
C-FLEX 10 k / 1 K - 120	1 000 ... 10 000 A c.a.
Measurement accuracy (+5 °C ... / +45 °C)	
Voltage	0.5 % of the reading
Current	0.5 % of the reading
Power ratings	1 % of the reading
Error in current sensing clips is not included	
Data memory	
Recording capacity	1 MB
Recording period	Programmable
Software: Program to configure the reading and presentation of data in an environment	PowerVision
Ambient conditions	
Limit temperature	0 °C ... +50 °C
Relative humidity	Maximum 85 % without condensation
Standards	
EN-61010 cat. III (Safety), IEC-60664 , VDE-0110 , UL-94 , EN-50081-1 , EN-50082 , EN-61000-4-15	

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Dimensions



References

RMS voltage	RMS current	Active, reactive and apparent power	FP	Frequency	Weighted RMS Flicker: WA	Flicker: Pst	Harmonics: THD	Gaps (Number of cycles)	Micro-drops (Number of cycles)	Classification of intervals of U	% correct cycles	Communications	Type	Code
•				•	•	•	•	•	•	•	•	RS-232	CAVA-251	Q20112
•	•			•	•	•	•	•	•	•	•	RS-232	CAVA-252	Q20122
•	•	•	•	•	•	•	•	•	•	•	•	RS-232	CAVA-253	Q20132

Distribution of memory

Type of file	Default storage capacity	Data stored
*.STD	74 days	Voltage, current, power, FP, flicker, harmonics, ...
*.EVQ	minimum of 342 events	Measurement events (overvoltages, voltage gaps and interruptions)
*.EVE	4655 records	Events related to the analyzer (change of setup, change of hour, etc.)