

QNA 413

Power quality analyzer



Description

QNA 413 is a state-of-the-art power quality analyzer certified as a class A device, in compliance with the **IEC-61000-4-30 Standard**. It takes measurements in compliance with the international standard and has a high degree of accuracy. It can be used to analyze the quality of supply (voltage, flicker, harmonics, events, etc.) in any installation. The most common cases are sub-stations or transformation centres and points where companies are connected to the network.

Application

- Real-time supervision and continuous recording of the power supply quality in any measurement point.
- Detection and instantaneous recording of all events (in compliance with the **IEC Standards**) detected in the measurement point. It can be used to detect the origin of events to implement the necessary actions and carry out the preventive maintenance actions, in order to optimize the performance of the installation, thus increasing the company's productivity.
- It is certified as class A in compliance with the **IEC-61000-4-30** international standard, allowing it to define the quality of supply, regardless of the country and area of distribution.

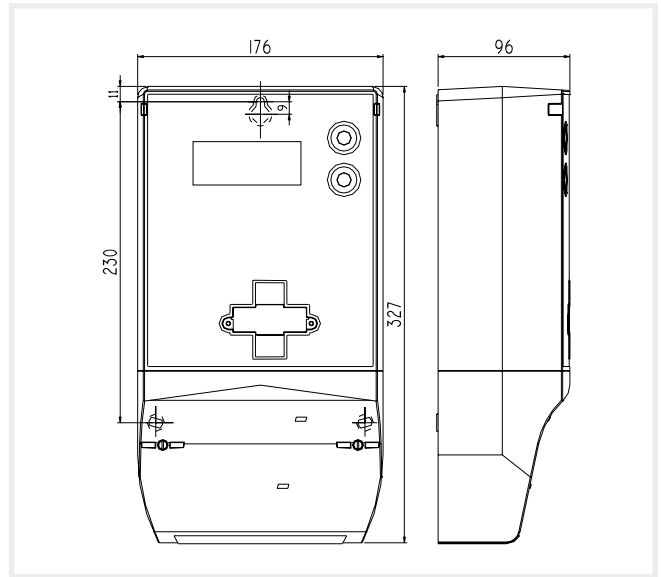
Characteristics

Power circuit	
Power supply range	100 - 400 Vac ($\pm 30\%$) / 90 - 730 Vdc
Consumption	16 V·A / 8 W
Frequency	50 - 60 Hz
Auxiliary power circuit	
Battery	Ni MH
Autonomy	Configurable, up to 9999 s of continuous operation
Voltage measurement circuit	
Nominal voltage	3 x 500 / 866 Vac (for 4-wire connections) 3 x 500 Vac (for 3-wire connections)
Other voltages	Through the measurement transformers
Frequency	42.5 ... 69 Hz
Sampling frequency	14.130 kHz
Consumption of the voltage per phase circuit	0.3 V·A
Accuracy	
Voltage	0.1 % U_n (IEC-61000-4-30 class A)
Unbalance	$\pm 0.15\%$ (IEC-61000-4-30 class A)
Flicker	5 % (IEC-61000-4-15 , IEC-61000-4-30 class A)
Harmonics	IEC-61000-4-7 class I, IEC-61000-4-30 class A
Communications	RS-232 / RS-485, GPRS / GSM / RS-232
Data memory	
Size	2 MB
Setup	Rotary (FIFO)
Ambient conditions	
Usage temperature	0 °C ... +50 °C
Storage temperature	-20 °C ... +70 °C
Build features	
Enclosure	In compliance with DIN 43859
Differential	IP 51
Dimensions	327 x 176 x 96 mm
Weight	2.3 kg
Safety	EN-61010-1 category III 600 V

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Dimensions



Standards

EN 60664, EN 61036, VDE 110, UL 94

Electromagnetic emission		Electromagnetic immunity	
EN 61000-3-2	Harmonics	EN 50082-2	Industrial immunity
EN 61000-3-3	Voltage fluctuations	EN 61000-4-2	Electrostatic discharge
EN 55022 class B	Driven	ENV 50140	EM Radiated field of RF
EN 55022 class A	Radiated	EN 61000-4-4	Quick temporary bursts
EN 50081-2	Industrial emission	ENV 50141	RF in common mode
-	-	EN 61000-4-5	Shockwave
-	-	EN 61000-4-8	50 Hz Magnetic field
-	-	EN 61000-4-11	Power supply interruptions

References

Voltage	Current	Power rating	Energy	Flicker	Harmonics and THD	Unbalance	Events	Certificate	Communications	Type	Code
•				•	50	•	•	Class A	RS-232 / RS-485	QNA-413 RS232/RS485	Q20411
•				•	50	•	•	Class A	GPRS / GSM / RS-232	QNA-413 GSM-Free	Q20413

Distribution of memory

Type of file	Default storage capacity	Data stored
*.STD	33 days	Voltage, flicker, harmonics and unbalance
*.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.)
*.H24	32 days	Data for the statistical study of the evolution of harmonics every 24 hours
*.STP	16 weeks	Weekly statistical voltage values, THD (U), flicker, frequency and unbalance

La distribución de la memoria es flexible y configurable por el usuario.

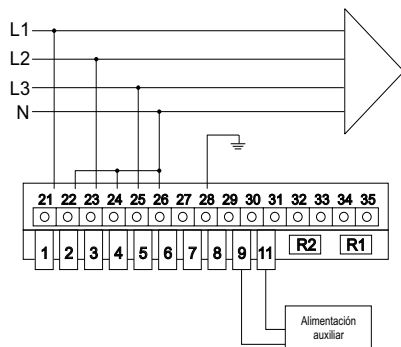
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Connections

LV 4 wires



MV 3 wires

