



410-QD1A-B0B10, Three-phase energy meters direct connection

Code: QB4N0 DESCATALOGADO

> Type Consumer: 4

> Discon. relay: No

> Communications: RS-232 | PRIME

> N° relays: 0

> Class (Active/Reactive): B (1) / 2

> System: Three-phase

> Measure: Direct

> Measurement Range (V): 3x230/400

> Measurement Range (A): 10 (100)

> Quadrants: 4

> Frequency (Hz): 50

Description

The Cirwatt B 410DP is a digital multifunction three-phase class-B/Class-1 meter for active energy and Class-2 for reactive energy. This meter complies with the international IEC 62053-21 and IEC 62053-23 standards, and with the European regulations on energy meters, EN 50470-1 and EN 50470-3 (MID), which allows them to be installed in any European Union country.

It features PLC (Prime Line Carrier) PRIME communications via the electrical grid, as well as an optical port and an RS-232 port for remote management via a GSM/3G modem. Both communications use the DLMS protocol.

It also has a logger for up to 3 months of time records for the 6 types of energy. It also allows the data to be read in the absence of voltage.

It includes a circuit breaker, which allows the user to control the electricity demand, which can be managed remotely using PLC communications.







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Specifications

AC power supply	
Tolerance	80 % 115 % Un
Consumption	< 2 W; < 10 VA
Frequency	50 / 60 Hz
Nominal voltage	3 x 230 (400) V
Battery specification	
Performance-guarantee	> 20 years @ 30 °C
Туре	Lithium
Mechanical characteristics	
Size (mm) width x height x depth	172 x 255 x 67 (mm)
Envelope	DIN 43859
Weight (kg)	1,6
Environmental characteristics	
Relative humidity (without condensation)	95 % max.
Storage temperature	-40 +85 °C
Working temperature	-40 +70 °C
Voltage measurement circuit	
Connection	Asymmetrical
Consumption	< 2 W; 10 VA
Nominal frequency	50 / 60 Hz
Nominal voltage	3x230/400 V
Current measurement circuit	
Consumption	< 0,1 VA
Reference current (Iref)	10 A
Maximum current	100 A
Minimum current measurement	< 0,5 x ltr
Communication Network	
Technology / Type	PRIME
Optical communication interface	
Hardware	IEC 62056-21
Protocol	DLMS
Туре	Serial;bi-directional







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User interface

Resolution of the display	up to 8 digits (8 mm)
Display type	LCD
Memory	
Memory capacity	Data: non-volatile memory, Setup and events: serial-flash
Write time	90 days
Туре	Serial flash
PLC	
Hardware	CENELEC
Protocol	DLMS / PRIME
Modulation system	OFDM
Measurement accuracy	
Reactive energy measurement (kvarh)	IEC 62053-23 (Class 2)
Active energy measurement (kWh)	EN 50470 (Class B) IEC 62053-21 (Class 1)
Features / performance	
Billing closures	12 locks per contract. Programable date and hour
Load curve	1 load curves, programmable integration time (1 60 min)
Tariff programming	12 days 24 types of data 6 types of tariffs 30 public holidays
Clock	
Source	Temperature compensated oscillator
Accuracy (EN 61038)	< 0,5 s/day (23 °C)
Туре	Gregorian calendar
Serial communication	
Technology / Type	RS-232







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Dimensions Connections





