



212-ES4A-B0B17

212-ES4A-B0B17, Single-phase energy meter

Code: QB3C0 DESCATALOGADO

- > Discon. relay: Yes
- > Communications: PRIME
- > Class (Active/Reactive): B / 2
- > System: Single-phase
- > Measure: Direct
- > Measurement Range (V): 230
- > Measurement Range (A): 10 (60)
- > Quadrants: 4
- > Frequency (Hz): 50

Description

CIRWATT B is a multi-function digital single-phase meter, Class B in active energy and Class 2 in reactive energy. The meter complies with European legislation related to energy meters (MID) **EN 50470-1** and **EN 50470-3**, which approves the installation of these meters in any country of the European Union.

It includes PLC / PRIME (Power Line Carrier) Communications through power cable and an optical communications port. Both use **DLMS** protocol. In addition, it can display information in case of power loss just pressing the button, it can store up to 6 channels of energy registers with 3 months of hourly load profile and it can limit maximum power consumed by end-user, through an internal disconnection relay which can be remotely managed using PLC communications

Application

The main application of the **CIRWATT B** meter is the metering of active and reactive energy for billing purposes, whenever a meter with high performance features is required at an optimised cost. PLC communications can be used for the remote download of all data recorded by the meter through a **PLC-1000** concentrator or any other PRIME concentrator.

The circuit breaker integrated in the meter can be used to manage the supply remotely, opening/closing the circuit breaker and programming the hired power above a value that will activate the circuit breaker, opening it and reclosing it to guarantee the safety for the final user



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Single-phase active and reactive energy meter with internal disconnection relay

Code: QB3C0

Specifications

AC power supply

| | |
|-----------------|------------------------------|
| Tolerance | 80 % ... 115 % Un |
| Consumption | < 2 W; < 10 VA |
| Frequency | 50 ... 60 Hz |
| Nominal voltage | 110 ... 230 V (80 ... 115 %) |

Mechanical characteristics

| | |
|----------------------------------|---------------------|
| Size (mm) width x height x depth | 172 x 206 x 67 (mm) |
| Envelope | DIN 43859 |
| Weight (kg) | 0,716 |

Environmental characteristics

| | |
|--|----------------|
| Relative humidity (without condensation) | 95 % max. |
| Storage temperature | -40 ... +85 °C |
| Operating temperature | -40 ... +70 °C |

Voltage measurement circuit

| | |
|-------------------|--------------|
| Connection | Asymmetrical |
| Consumption | < 2 W; 10 VA |
| Nominal frequency | 50 / 60 Hz |
| Nominal voltage | 230 V |

Current measurement circuit

| | |
|-----------------------------|-----------------|
| Consumption | 0,024 VA @ 10 A |
| Reference current (Iref) | 10 A |
| Maximum current | 60 A |
| Minimum current measurement | 25 mA |

Battery specification

| | |
|-----------------------|--------------------|
| Performance-guarantee | > 20 years @ 30 °C |
| Type | Lithium |

Optical communication interface

| | |
|----------|-----------------------|
| Hardware | IEC 62056-21 |
| Protocol | DLMS |
| Type | Serial;bi-directional |

User interface



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| | |
|---------------------------|-----------------------|
| Resolution of the display | up to 6 digits (9 mm) |
| Display type | LCD |

Memory

| | |
|-----------------|---|
| Memory capacity | Data: non-volatile memory, Setup and events: serial-flash |
| Write time | 90 days |
| Type | Serial flash |

PLC

| | |
|-------------------|---------------------------|
| Hardware | CENELEC A |
| Protocol | DLMS / PRIME |
| Modulation system | OFDM with repeater system |

Measurement accuracy

| | |
|-------------------------------------|---|
| Reactive energy measurement (kvarh) | UNE-EN 62053-21 (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 |
| Type | Gregorian calendar |

CIRWATT B II PRIME

Single-phase energy meters with PLC system (measuring, load profiling, multi configurable billing calendar)

| CODE | TYPE | Communications | N° relays | Class (Active/Reactive) | Measure | Measurement Range (V) | Measurement Range (A) | Discon. relay | Hourly discrimination |
|-------------------------|-----------------|----------------|-----------|-------------------------|---------|-----------------------|-----------------------|---------------|-----------------------|
| CIRWATT B 200RCP | | | | | | | | | |
| QB3COM10 | 212-ES4A-B0B17 | PRIME | 0 | B (1) / 2 | Direct | 230 | 10 (60) | 1 | 2.0DHA / 2.1DHA |
| QB3C0 | 212-ES4A-B0B17 | PRIME | 0 | B / 2 | Direct | 230 | 10 (60) | 1 | - |
| QB3COM11 | 212-ES4A-B0B17 | PRIME | 0 | B (1) / 2 | Direct | 230 | 10 (60) | 1 | 2.0A / 2.1A |
| QB3C3 | 212-ES4A-BFB-17 | PRIME | 1 | B / 2 | Direct | 230 | 10 (60) | 1 | - |
| QB3C3M10 | 212-ES4A-BFB17 | PRIME | 1 | B (1) / 2 | Direct | 230 | 10 (60) | 1 | 2.0DHA / 2.1DHA |
| QB3C3M11 | 212-ES4A-BFB17 | PRIME | 1 | B (1) / 2 | Direct | 230 | 10 (60) | 1 | 2.0A / 2.1A |



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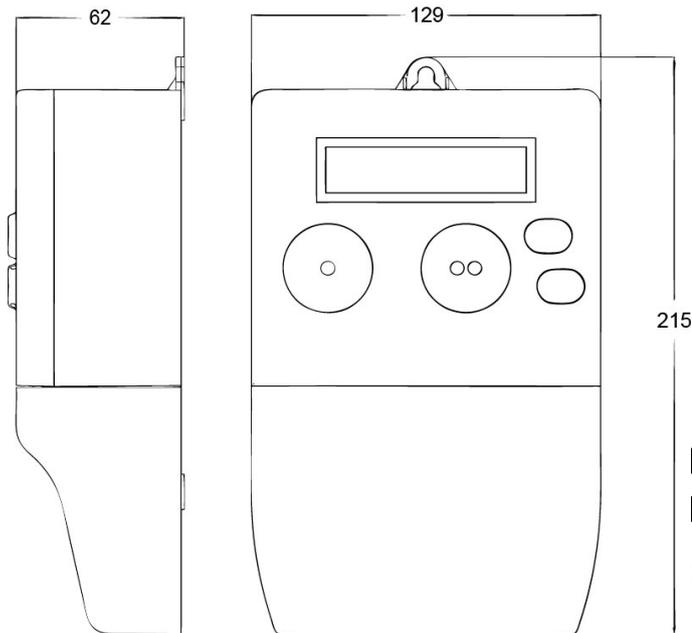


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Dimensions



Connections

