

# CIRWATT B 200RCP

Single-phase active energy meter, Class B\* and reactive, Class 2

## 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.

## Features

<b>Power supply</b>	
Nominal voltage	230 V
Tolerance	80 % ... 115 % $U_n$
Consumption	<2 W; 10 V·A
Frequency	50 Hz
<b>Voltage measurement</b>	
Connection	Asymmetrical
Reference voltage	230 V
Frequency	50 or 60 Hz
Voltage circuit consumption	< 2 W; 10 V·A
<b>Current measurement</b>	
Nominal reference current, $I_{ref}$	10 A
Maximum current $I_{max}$	60 A
Start-up current $I_{st}$	< 0.04 x $I_{tr}$
Minimum current $I_{min}$	< 0.5 x $I_{tr}$
Current circuit consumption	0.024 V·A at 10 A
<b>Accuracy class</b>	
Accuracy measured in active energy	EN 50470 - Class B*
Accuracy measured in reactive energy	UNE-EN 62053-21 - Class 2
<b>Memory</b>	
Data	Non-volatile memory
Setup and events	Serial flash



<b>Battery</b>	
Type	Lithium
Working Life	>20 years @ 30 °C
<b>Clock</b>	
Type	Gregorian calendar
Source	Temperature compensated oscillator
Accuracy (EN61038)	< 0.5 s/day
<b>Environmental influence</b>	
Operating temperature range	-25 ... +70°C
Storage temperature range	-40 ... +85°C
Temperature coefficient	< 15 ppm/K
Humidity	95 % max.
<b>Insulation</b>	
Insulating voltage	4 kV to 50 Hz during 1 min
Impulse voltage 1.2/50 $\mu$ s - IEC 62052-11	6 kV
Protection degree (IEC 62052-11)	II
<b>Display</b>	
Type	LCD
Number of data digits	UP to 6
Size of data digits	9 mm
Display data reading when there is no voltage	Yes

\* Class B is equivalent to a Class 1

# CIRWATT B 200 RCP

Single-phase active energy meter, Class B and reactive, Class 2

## Features

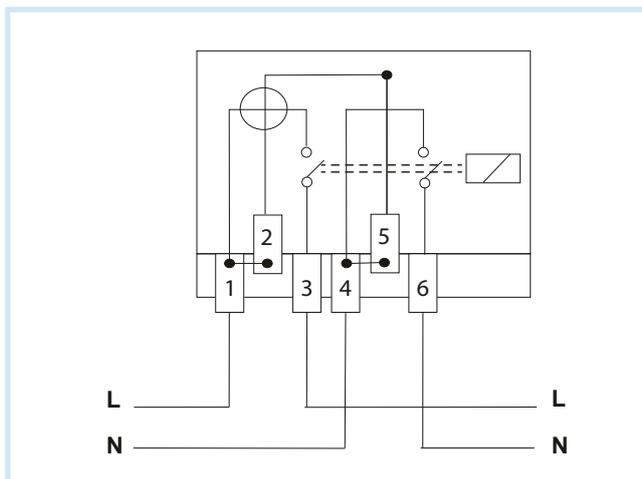
Optical communications interface	
Type	Serial, two-directional
Hardware	IEC 62056-21
Protocol	DLMS
Tampering detector	
Detection	Opening the terminal cover
Type	Micro-switch
Construction features	
Connection	Asymmetrical
External dimensions	DIN 43857
Enclosing features	DIN 43859
IP Degree (IEC 60529)	IP 51
PLC	
Modulation system	OFDM with repeater system
Hardware	CENELEC A
Protocol	DLMS / PRIME

Rate programming	
Number of seasons	12
Types of days profiles	24
Contracts	3
Number of rates	6
Discrimination	24 switch per day
Holidays/festivities	30
Load curve	
Number of load curves	1
Integration time	Programmable: 1 ... 60
Recording depth	3 months
Events	
Number of events	310
Billing closures	
Number of bills	12, per contract
Type	Disabled / Programmable date and hour
Circuit breaker	
Type	Bistable relay
Maximum switching current	60 A

## References

Metering voltage 230 Vac	Current metering range (A)	Hourly discrimination	Quadrants	Relay outputs	Impulse outputs	Impulse inputs	Communication	Internal Circuit breaker	Type
•	10 (60)	DH 1	4				PRIME	•	CIRWATT B - 212-ES4A-B0B-13
•	10 (60)	DH 0	4	2			PRIME	•	CIRWATT B - 212-ES4A-BFB-13

## Connections



## Dimensions

