



## 405-MT5A-90B10

405-MT5A-90B10, Three-phase energy meter indirect connection

Code: QBP1E

- > Type Consumer: 2
- > Communications: RS-232 | RS-485
- > Class (Active/Reactive): C (0,5S)/1
- > System: Three-phase
- > Measure: Indirect
- > Measurement Range (V): 3x63,5/110
- > Measurement Range (A): .../5
- > Quadrants: 4
- > Frequency (Hz): 50

### Description

The CIRWATT-B505 is an indirect three-phase meter, recorder, and multi-tariff device, classified as Class C for active energy as per the European MID Directive (EN 50470) or Class 0.5s as per IEC-62053-22, and reactive energy Class 1 as per IEC-62053-23. It offers multiple communication options and expansion modules, allowing it to adapt to any type of industrial or tertiary sector installation.

### Application

CIRWATT B-505 is ideal for medium-voltage supplies using external voltage and current transformers. Offering solutions for large industry with a power between 450 kW and 10 MW (Consumer type 2). Available in 2 quadrants for energy consumption or 4 quadrants for photovoltaic plants (energy generation and consumption).



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### Specifications

#### AC power supply

Tolerance	80 % ... 115 % Un
Consumption	< 2 W; < 10 VA
Frequency	50 / 60 Hz
Nominal voltage	3x63.5/110 V

#### Battery specification

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

#### Mechanical characteristics

Size (mm) width x height x depth	172 x 255 x 67 (mm)
Weight (kg)	1,9

#### Environmental characteristics

Relative humidity (without condensation)	95 % max.
Storage temperature	-40 ... +85 °C
Working temperature	-25 ... +70 °C

#### Voltage measurement circuit

Connection	Asymmetrical
Consumption	< 2 W; 10 VA
Nominal frequency	50 / 60 Hz
Nominal voltage	3x63,5/110 V

#### Current measurement circuit

Consumption	< 0,1 V·A
Reference current (Iref)	.../ 5 A
Maximum current	10 A
Minimum current measurement	< 0,5 x Itr

#### 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
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Write time	4000
Type	Serial flash

## Standards

Standards	UNE-EN 50470-1 Electricity metering equipment (a.c.) -- Part 1: General requirements, tests and test conditions - Metering equipment -class indexes B-) UNE-EN 50470-3 Electricity metering equipment (a.c.) -- Part 3: Particular requirements - Static meters for active energy -class indexes B-) IEC 62052-11, IEC 62053-21, IEC 62053-22 (Standards for static active energy meters for alternating current of class 0.2s, 0.5s) UNE-EN 55022 (Conducted Emissions: Class B, Radiated Emissions: Class B) UNE-EN 61000-4-2, UNE-EN 61000-4-3, UNE-EN 61000-4-4, UNE-EN 61000-4-5, UNE-EN 61000-4-6, UNE-EN 61000-4-8, UNE-EN 61000-4-11
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## Measurement accuracy

Reactive energy measurement (kvarh)	IEC 62053-23 (Class 1 / 2)
Active energy measurement (kWh)	IEC 62053-22 (Class 0,5S) EN 50470 (Class C)

## Serial communication

Protocol	REE, basado en IEC 870-5-102
Technology / Type	RS-232 RS-485

## CIRWATT B 505

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CODE	TYPE	Measurement Range (V)	Measurement Range (A)	Communications	Class (Active / Reactive)	System	Measure
CIRWATT B 505							
QBP1I	405-MT5A-70B10	3x63,5/110	.../5	RS-232   RS-232	C (0,5S)/1	Three-phase	Indirect
QBP1J	405-MT5A-80B10	3x63,5/110	.../5	RS-485   RS-485	C (0,5S)/1	Three-phase	Indirect
QBP1E	405-MT5A-90B10	3x63,5/110	.../5	RS-232   RS-485	C (0,5S)/1	Three-phase	Indirect
QBP1F	405-MT5A-A0B10	3x63,5/110	.../5	RS-232   Ethernet	C (0,5S)/1	Three-phase	Indirect
QBP1K	405-MT5A-C0B10	3x63,5/110	.../5	RS-485   Ethernet	C (0,5S)/1	Three-phase	Indirect
QBN00	405-VT7A-90B10	3x57/100 ... 3x230/400	.../ 1	RS-232   RS-485	C (0,5S)/1	Three-phase	Indirect
QBN10	405-VT7A-A0B10	3x57/100 ... 3x230/400	.../ 1	RS-232   Ethernet	C (0,5S)/1	Three-phase	Indirect
QBN30	405-VT7B-90B10	3x57/100 ... 3x230/400	.../ 1	RS-232   RS-485	C (0,5S)/1	Three-phase	Indirect

Please contact us for other configurations (Inputs, outputs and other communications)

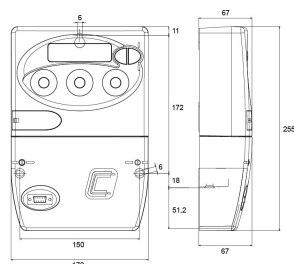
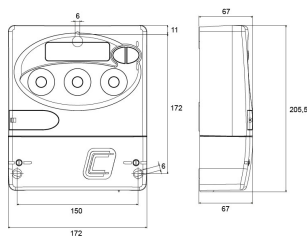


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### Dimensions



### Connections

