



405-VT5A-90B10-TRMC400-1000-3.0.2, Three-phase energy meter indirect connection

Code: QBK10T24 DESCATALOGADO

> Type Consumer: 3

> Communications: RS-232 | RS-485 > Class (Active/Reactive): B (1) / 2

> System: Three-phase > Measure: Indirect

> Measurement Range (V): 3x230/400 > 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

Tolerance	80 % 115 % Un	
Consumption	< 2 W; < 10 VA	
Frequency	50 / 60 Hz	
Nominal voltage	3 x 57 (100) V 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)	1,1	
invironmental characteristics		
Relative humidity (without condensation)	95 % max.	
Storage temperature	-40 +85 °C	
Working temperature	-40 +70 °C	
oltage measurement circuit		
Connection	Asymmetrical	
Consumption	< 2 W; 10 VA	
Nominal frequency	50 / 60 Hz	
Nominal voltage	3x57/100 3x230/400 V	
Current measurement circuit		
Consumption	< 0,1 V·A	
Reference current (Iref)	/ 5 A	
Maximum current	10 A	
Minimum current measurement	< 0,5 x ltr	
Optical communication interface		
Hardware	IEC 62056-21	
Protocol	REE, based on IEC 870-5-117	
Туре	Serial;bi-directional	







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Jser		

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	4000
Туре	Serial flash
PLC	
Hardware	CENELEC A or CENELEC B
Protocol	CirPLC & PEP (PLC Encapsulated Protocol)
Modulation system	DSCK with repeater system
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	
Rilling clasures	12 locks per contract. Programable date and hour
Billing closures Load curve	12 locks per contract. Programable date and hour 2 load curves, programmable integration time (1 253 min)
•	2 load curves, programmable integration time (1 253 min) Communications: RS-232 / PLC ,RS-485 / PLC, RS-232 / RS-232 , RS-485 / RS-485, RS-232 / RS-485, RS-232 / Ethernet, R-485 / Ethernet. Expansion boards: No inputs / outputs, 4 relay outputs (Rate Indicator), 2 relay inputs / 4
Load curve	2 load curves, programmable integration time (1 253 min) Communications: RS-232 / PLC ,RS-485 / PLC, RS-232 / RS-232 , RS-485 / RS-485, RS-232 / RS-485, RS-232 / Ethernet, R-485 / Ethernet. Expansion boards: No inputs / outputs, 4 relay outputs (Rate Indicator), 2 relay inputs / 4 pulse outputs, 4 pulse inputs, 0 Differential current measurement, 2 relay outputs /
Load curve Optional	2 load curves, programmable integration time (1 253 min) Communications: RS-232 / PLC ,RS-485 / PLC ,RS-232 / RS-232 , RS-485 / RS-485, RS-232 / RS-485, RS-232 / Ethernet, R-485 / Ethernet. Expansion boards: No inputs / outputs, 4 relay outputs (Rate Indicator), 2 relay inputs / 4 pulse outputs, 4 pulse inputs, Differential current measurement, 2 relay outputs / 2 pulse outputs, / 2 pulse inputs
Load curve Optional Tariff programming	2 load curves, programmable integration time (1 253 min) Communications: RS-232 / PLC ,RS-485 / PLC, RS-232 / RS-232 , RS-485 / RS-485, RS-232 / RS-485, RS-232 / Ethernet, R-485 / Ethernet. Expansion boards: No inputs / outputs, 4 relay outputs (Rate Indicator), 2 relay inputs / 4 pulse outputs, 4 pulse inputs, Differential current measurement, 2 relay outputs / 2 pulse outputs, / 2 pulse inputs
Load curve Optional Tariff programming Clock	2 load curves, programmable integration time (1 253 min) Communications: RS-232 / PLC ,RS-485 / PLC ,RS-232 / RS-232 , RS-485 / RS-485, RS-232 / RS-485, RS-232 / Ethernet, R-485 / Ethernet. Expansion boards: No inputs / outputs, 4 relay outputs (Rate Indicator), 2 relay inputs / 4 pulse outputs, 4 pulse inputs, Differential current measurement, 2 relay outputs / 2 pulse outputs, / 2 pulse inputs 12 days 10 types of data 9 types of tariffs 30 public holidays 12 special days
Load curve Optional Tariff programming Clock Source	2 load curves, programmable integration time (1 253 min) Communications: RS-232 / PLC ,RS-485 / PLC ,RS-232 / RS-232 , RS-485 / RS-485, RS-232 / RS-485, RS-232 / Ethernet, R-485 / Ethernet. Expansion boards: No inputs / outputs, 4 relay outputs (Rate Indicator), 2 relay inputs / 4 pulse outputs, 4 pulse inputs, Differential current measurement, 2 relay outputs / 2 pulse outputs, / 2 pulse inputs 12 days 10 types of data 9 types of tariffs 30 public holidays 12 special days Temperature compensated oscillator
Load curve Optional Tariff programming Clock Source Accuracy (EN 61038)	2 load curves, programmable integration time (1 253 min) Communications: RS-232 / PLC ,RS-485 / PLC ,RS-232 / RS-232 , RS-485 / RS-485, RS-232 / RS-485, RS-232 / Ethernet, R-485 / Ethernet. Expansion boards: No inputs / outputs, 4 relay outputs (Rate Indicator), 2 relay inputs / 4 pulse outputs, 4 pulse inputs, Differential current measurement, 2 relay outputs / 2 pulse outputs, / 2 pulse inputs 12 days 10 types of data 9 types of tariffs 30 public holidays 12 special days Temperature compensated oscillator < 0,5 s/day (23 °C)
Load curve Optional Tariff programming Clock Source Accuracy (EN 61038) Type	2 load curves, programmable integration time (1 253 min) Communications: RS-232 / PLC ,RS-485 / PLC ,RS-232 / RS-232 , RS-485 / RS-485, RS-232 / RS-485, RS-232 / Ethernet, R-485 / Ethernet. Expansion boards: No inputs / outputs, 4 relay outputs (Rate Indicator), 2 relay inputs / 4 pulse outputs, 4 pulse inputs, Differential current measurement, 2 relay outputs / 2 pulse outputs, / 2 pulse inputs 12 days 10 types of data 9 types of tariffs 30 public holidays 12 special days Temperature compensated oscillator < 0,5 s/day (23 °C)

CIRWATT B 505

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CODE	TYPE	Measurement Range (V)	Measurement Range (A)	Communications	Class (Active/Reactive)	System	Measure
CIRWA	TT B 505						
QBP1I	405-MT5A-70B10	3x63,5/110	/5	RS-232 RS-232	C (0,5S)/1	Three-phase	Indirect
QBK10	405-VT5A-90B10	3x57/100 3x230/400	/5	RS-232 RS-485	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





