,

Code:

Description

CIRWATT-B410T is an indirect multi-rate three-phase meter and logger, Class B in active energy as per the European MID Directive (EN 50470), or Class 1 as per IEC-62053-21 and Class 2 reactive energy as per IEC-62053-23, with multiple communications options and expansion modules that allow it to be adapted to any type of industrial and tertiary sector installation.

Application

CIRWATT B-410T is perfect for low- and medium-voltage supplies using external current transformers. Offering solutions for a wide variety of installations such as: shopping centres, industries and high-consumption residential areas (Consumer type 3). Available in 2 quadrants for energy consumption or 4 quadrants for photovoltaic plants (energy generation and consumption).

Creation date: 04/11/2026 - CIRCUTOR, SAU reserves the right to make technical changes or modify the content/images of this document without prior notice, in order to improve its reliability, functionality, design or for other reasons.
It accepts no liability for any errors, inaccuracies or possible lack of information in this document.



Code:

Specifications

AC power supply

Tolerance	80 % ... 115 % Un
Consumption	< 2 W; < 10 VA
Frequency	50 / 60 Hz
Nominal voltage	3 x 230 (400) V

Mechanical characteristics

Size (mm) width x height x depth	172 x 255 x 67 (mm)
Envelope	DIN 43859
Weight (kg)	1

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	3x230/400 V

Current measurement circuit

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

Communication Network

Protocol	3x230/400 V

Battery specification

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

Optical communication interface

Hardware	IEC 62056-21
Protocol	REE, IEC 870-5-128
Type	Serial;bi-directional

Creation date: 04/11/2026 - CIRCUTOR, SAU reserves the right to make technical changes or modify the content/images of this document without prior notice, in order to improve its reliability, functionality, design or for other reasons.
It accepts no liability for any errors, inaccuracies or possible lack of information in this document.



Code:

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	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

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

Billing closures	12 locks per contract. Programable date and hour
Load curve	2 load curves, programmable integration time (1 ... 253 min)
Optional	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
Tariff programming	12 days 10 types of data 9 types of tariffs 30 public holidays 12 special days

Clock

Source	Temperature compensated oscillator
Accuracy (EN 61038)	< 0,5 s/day (23 °C)
Type	Gregorian calendar

Serial communication

Protocol	REE, IEC 870-5-102



Code:

Technology / Type	RS-232|RS-232

CIRWATT B 410T

Indirect multi-rate three-phase meter and logger, Class B in active energy as per the European MID Directive (EN 50470), or Class 1 as per IEC-62053-21

CODE	TYPE	Measurement Range (V)	Measurement Range (A)	Communications	Class (Active/Reactive)	System	Measure
CIRWATT B 410T							
QB860	410-QT5A-70B10	3x230/400	.../5	RS-232 | RS-232	B (1) / 2	Three-phase	Indirect
QBH30	410-MT5A-90B10	3x63,5/110	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBH40	410-MT5A-A0B10	3x63,5/110	.../5	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect
QBH50	410-MT5A-C0B10	3x63,5/110	.../5	RS-485 | Ethernet	B (1) / 2	Three-phase	Indirect
QB870T23	410-QT5A-90B10-TRMC210-500-3.0.TD	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T22	410-QT5A-90B10-TRMC210-200-3.0.TD	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T21	410-QT5A-90B10-TRMC210-100-3.0.TD	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T04	410-QT5A-90B10-TRMC210-1000-3.0.2	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T03	410-QT5A-90B10-TRMC210-500-3.0.2	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T02	410-QT5A-90B10-TRMC210-200-3.0.2	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T01	410-QT5A-90B10-TRMC210-100-3.0.2	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T08	410-QT5A-90B10-TRMC210-1000-3.0.1	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T07	410-QT5A-90B10-TRMC210-500-3.0.1	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T06	410-QT5A-90B10-TRMC210-200-3.0.1	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB870T05	410-QT5A-90B10-TRMC210-100-3.0.1	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QB8A0	410-QT5A-80B10	3x230/400	.../5	RS-485 | RS-485	B (1) / 2	Three-phase	Indirect
QB870	410-QT5A-90B10	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBG60	410-NT5A-70B10	3x127/220	.../5	RS-232 | RS-232	B (1) / 2	Three-phase	Indirect
QB880	410-QT5A-A0B10	3x230/400	.../5	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect
QBGA0	410-NT5A-80B10	3x127/220	.../5	RS-485 | RS-485	B (1) / 2	Three-phase	Indirect
QBG70	410-NT5A-90B10	3x127/220	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBG80	410-NT5A-A0B10	3x127/220	.../5	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect
QB890	410-QT5A-C0B10	3x230/400	.../5	RS-485 | Ethernet	B (1) / 2	Three-phase	Indirect
QB8D0	410-QT5B-90B10	3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBG90	410-NT5A-C0B10	3x127/220	.../5	RS-485 | Ethernet	B (1) / 2	Three-phase	Indirect
QB8E0	410-QT5B-A0B10	3x230/400	.../5	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect
QBH20	410-MT5A-70B10	3x63,5/110	.../5	RS-232 | RS-232	B (1) / 2	Three-phase	Indirect
QBN0B	410-QT7A-90B10	3x230/400	.../ 1	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBN1B	410-QT7A-A0B10	3x230/400	.../ 1	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect
QBN2B	410-QT7B-90B10	3x230/400	.../ 1	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBH61	410-MT5A-80B10	3x63,5/110	.../5	RS-485 | RS-485	B (1) / 2	Three-phase	Indirect
QBN3B	410-QT7B-A0B10	3x230/400	.../ 1	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect
QBJ10	410-VT5A-90B10	3x57/100 ... 3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBN0J	410-VT7A-90B10	3x57/100 ... 3x230/400	.../ 1	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBN1J	410-VT7A-A0B10	3x57/100 ... 3x230/400	.../ 1	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect
QBJ20	410-VT5A-A0B10	3x57/100 ... 3x230/400	.../5	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect
QBJ30	410-VT5A-C0B10	3x57/100 ... 3x230/400	.../5	RS-485 | Ethernet	B (1) / 2	Three-phase	Indirect
QBJ60	410-VT5B-90B10	3x57/100 ... 3x230/400	.../5	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBJ70	410-VT5B-A0B10	3x57/100 ... 3x230/400	.../5	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect

Creation date: 04/11/2026 - CIRCUTOR, SAU reserves the right to make technical changes or modify the content/images of this document without prior notice, in order to improve its reliability, functionality, design or for other reasons.
It accepts no liability for any errors, inaccuracies or possible lack of information in this document.



Code:

CODE	TYPE	Measurement Range (V)	Measurement Range (A)	Communications	Class (Active/Reactive)	System	Measure
QBN2J	410-VT7B-90B10	3x57/100 ... 3x230/400	.../ 1	RS-232 | RS-485	B (1) / 2	Three-phase	Indirect
QBN3J	410-VT7B-A0B10	3x57/100 ... 3x230/400	.../ 1	RS-232 | Ethernet	B (1) / 2	Three-phase	Indirect
QBN40	410-VT7B-A0B10	3x57/100 ... 3x230/400	.../ 1	RS-232 | Ethernet	C (0,5S)/1	Three-phase	Indirect

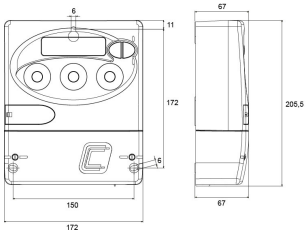
Please contact us for other configurations (Inputs, outputs and other communications)

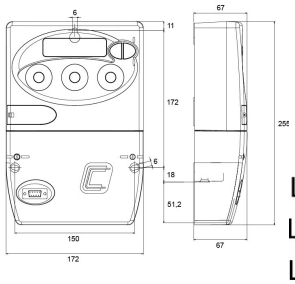
Creation date: 04/11/2026 - CIRCUTOR, SAU reserves the right to make technical changes or modify the content/images of this document without prior notice, in order to improve its reliability, functionality, design or for other reasons.
It accepts no liability for any errors, inaccuracies or possible lack of information in this document.



Code:

Dimensions





Connections

