



## CEM-C31

CEM-C31, three-phase energy meter

Code: Q23442. DESCATALOGADO

> Módules: 4 > Tariff: 1

> Certification: IEC> Transistor output: 1> System: Three-phase> Measure: Indirect

> Measurement Range (V): 3 x 57/100...3 x 230/400

> Input current: .../ 5 (6) A

#### Description

Three-phase electrical energy meter with indirect measurement, 5(10)A (, CEM-C31), direct measurement 65 A (CEM-C21) or single-phase energy meter (CEM-C10).

Built-in LCD display (7 digits) with rotating screen system. It can have integrated RS-485 communications, depending on the model.. Also features

2 buttons (1 sealable button) for viewing all the measured information.

Other features include:

- o MID certification, module B+D (depending on the type)
- o Class 1 active energy (Class B, in accordance with MID), Class 2 reactive energy
- Complies with the EN 50470 (MID European standards) or IEC 62052-11 standards (international standards), depending on the type.
- o Compact size (CEM-C10: 2 modules, 36 mm, CEM-C21 y CEM-C31: 4 modules, 72 mm)
- o Resettable partial meter
- 1 programmable impulse output, in accordance with DIN 43864 (CEM-C10, CEM-C31-T1, CEM-C21-T1 models)
- o 1 Digital input for Tariff selection and impulse count (CEM-C31-D, CEM-C21-DS)
- o Indicates bad connections on the screen
- o Energy storage, even in the case of bad connections

### **Application**

- o Redundant meter for verifying the energy allocated by the energy provider.
- o Energy consumption report sent to a remote system (PLC/BMS).
- $\circ$   $\,$  Cost control for achieving a high consumption/unit ratio in industrial processes.
- $\circ~$  Display of electrical parameters (V, A, kW, kW·h, PF, etc.), per phase and three-phase.







## CEM-C31

Energy meter for DIN rail mounting

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## **Specifications**

#### Voltage measurement circuit

Consumption	< 2W , < 10VA (In, Vref)
Nominal voltage	3 x 127/220 3 x 230/400 V ~

#### **CEM-C** Energy meter

CODE	TYPE	Measurement Range (V)	Measurement Range (A)	Communications	Protocol	Transistor output	Digital inputs	Tariff	Certification
Direct th	ree-phase								
Q22411.	CEM-C21-T1	3 x 127/2203 x 230/400	5 (65) A	-	-	1	-	1	IEC
Q22421.	CEM-C21-485-T1	3 x 127/2203 x 230/400	5 (65) A	RS-485	Modbus/RTU	1	-	1	IEC
Q22431.	CEM-C21-485-DS	3 x 127/2203 x 230/400	5 (65) A	RS-485	Modbus/RTU	0	1	2	IEC
Q22412.	CEM-C21-T1-MID	3 x 127/2203 x 230/400	5 (65) A	-	-	1	-	1	MID
Q22422.	CEM-C21-485-T1-MID	3 x 127/2203 x 230/400	5 (65) A	RS-485	Modbus/RTU	1	-	1	MID
Q22432.	CEM-C21-485-DS-MID	3 x 127/2203 x 230/400	5 (65) A	RS-485	Modbus/RTU	0	1	2	MID
Indirect t	three-phase								
Q23511.	CEM-C31-T1	3 x 57/1003 x 230/400	/ 5 (10) A	-	-	1	-	1	IEC
Q23521.	CEM-C31-485-T1	3 x 57/1003 x 230/400	/ 5 (10) A	RS-485	Modbus/RTU	1	-	1	IEC
Q23531.	CEM-C31-485-DS	3 x 57/1003 x 230/400	/ 5 (10) A	RS-485	Modbus/RTU	0	1	2	IEC
Q23512.	CEM-C31-T1-MID	3 x 57/1003 x 230/400	/ 5 (10) A	-	-	1	-	1	MID
Q23522.	CEM-C31-485-T1-MID	3 x 57/1003 x 230/400	/ 5 (10) A	RS-485	Modbus/RTU	1	-	1	MID
Q23532.	CEM-C31-485-DS-MID	3 x 57/1003 x 230/400	/ 5 (10) A	RS-485	Modbus/RTU	0	1	2	MID

CEM-C10 and CEM-C21/C31 without built-in RS-485 communications can optionally communicate with CEM-M-ETH and CEM-M-RS485 modules. Devices with absolute measurements (Abs). For 2 or 4 quadrants, see the Aditional table Frecuency: 50/60 Hz. Parameters: V, A, kW, kVA, kWh, cos phi

CEM-XXX-TI encoding table - Devices with pulse output (transistor)
CEM-XXX-DS-Devices with digital input for tariff change and impulse meter







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Energy meter for DIN rail mounting

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## **Dimensions**



