



CEM-M-ETH, Communication module

Code: Q23400. CONSULTAR DISPONIBILIDAD

> Protocol: Modbus/TCP> Communications: Ethernet

#### Description

**CEM-M** are interchangeable communication modules for the **CEM-C** energy meters assembled on DIN rails. These modules can increase the performance of the energy meters, so that any meter can be adapted to the communication systems in place in the installation.

Energy management systems require the use of meters that comply with international measurement regulations, but which can also be integrated with the standard communication protocols used in buildings. The **CEM-M** range allows the user to install the **CEM-C** meter that is best suited to the installation (single-phase, direct three-phase or indirect three-phase), subsequently adding the most adequate **CEM-M** module, in accordance with the communications protocol.

The following can be performed with the modular system, among other actions:

- o Selecting the energy meter and subsequently adding the communication systems required by the BMS.
- Reducing the stock of references, since the meter should not be replaced, regardless of whether the client chooses to read the meter remotely or not and to do so with a specific protocol.

### **Application**

- Redundant meter to verify energy allocated by the energy distributor.
- Reporting of energy consumption to a remote system (PLC/BMS).
- o Cost control to obtain a consumption/unit ratio in industrial processes.
- Phase and three-phase electrical parameter (V, A, kW, kWh, PF, etc.) display.







Communication modules for CEM meters, assembly on DIN rail

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## **Specifications**

| AC power supply                          |   |
|--|---|
| Installation category                    | CAT III 300 V   |
| Consumption                              | 2.4 2.7 VA  |
| Frequency                                | 50 / 60 Hz  |
| Nominal voltage                          | 230 V ~ ±20 %   |
| Mechanical characteristics               |   |
| Size (mm) width x height x depth         | 35 x 90 x 61 (mm)                                       |
| Weight (kg)                              | 0,1   |
| Environmental characteristics            |   |
| Relative humidity (without condensation) | 5 95 %  |
| Electrical characteristics               |   |
| Insulation voltage, circuit              | 4 kV RMS 50 Hz durante 1 min                            |
| Communication Network                    |   |
| Protocol                                 | Modbus TCP  |
| Technology / Type                        | Ethernet  |
| Standards                                |   |
| Electrical safety, Maximum height (m)    | 2000  |
| Standards                                | IEC 61010-1, IEC 61000-6-2, IEC 61000-6-3               |
| User interface                           |   |
| LED                                      | 3 LED: POWER/LINK/COMS                                  |
| Serial communication                     |   |
| Protocol                                 | Modbus RTU  |
| Wireless communication                   |   |
| Technology / Type                        | Optical IR port (additional external receiver required) |
|  |   |

### CEM-M

Comunication module

| CODE    | TYPE        | Communications | Protocol   |
|---------|-------------|----------------|------------|
| Q23100. | CEM-M-RS485 | RS-485         | Modbus/RTU |







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| CODE    | TYPE      | Communications | Protocol   |
|---------|-----------|----------------|------------|
| Q23403. | CEM-M-ETH | Ethernet       | Modbus/TCP |

Compatible with CEM-C10 and CEM-C21/C31 meters without built-in RS-485 communications







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# **Dimensions**



