CEM-M-RS485

CEM-M-RS485, Communication module

Code: Q23100.

> Protocol: Modbus / RTU
> Communications: RS-485

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:

○ 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).
○ Cost control to obtain a consumption/unit ratio in industrial processes.
○ Phase and three-phase electrical parameter (V, A, kW, kWh, PF, etc.) display.

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Specifications

AC power supply

Consumption	4 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)	0,11

Environmental characteristics

Relative humidity (without condensation)	5 ... 95 %

Electrical characteristics

Insulation voltage, circuit	4 kV RMS 50 Hz durante 1 min

Communications

Stop bits (ModBus)	1
Parity	non
Protocol	ModBus
Speed	9600 - 19200 - 38400

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

CEM-M
Comunication module

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