

CEM-D310 -MID

CEM-D310 -MID, Indirect three-phase energy meter with MID certification

Code: Q23602.

> Módules: 4
> Certification: MID
> Transistor output: 1
> System: Three-phase
> Measure: Indirect
> Measurement Range (V): 3x127(230)...3x230(400)V
> Measurement Range (A): .../5A o .../1A

Description

Three-phase electric energy meter with indirect measurement .../5 A and .../1 A (depending on model), featuring sealable terminals and optional communication via Modbus RS-485 and M-BUS protocols (depending on model).

Main features include:

- MID certification, modules B+D (depending on model).
- Class 1 for active energy (Class B as per MID), Class 2 for reactive energy.
- Compliant with EN 50470 (European MID standard) or IEC 62052-11 (international standard), depending on the model.
- Compact size (4 DIN rail modules).
- Resettable partial energy counter.
- 1 programmable pulse output (depending on model).
- 1 digital input for tariff control and pulse counting (depending on model).
- Time-of-use tariff calendar.
- Modbus RS-485 and M-BUS communications (depending on model).
- Display of basic electrical parameters (V, A, kW, kWh, PF, etc.).

Application

- Meter for energy sub-metering.
- Applications where certified MID meters are required for energy verification and billing.
- Meter used to verify the energy invoiced by the electricity distributor.
- Energy consumption reporting and connectivity with SCADA systems.
- Energy and cost control in industrial processes.

Creation date: 05/11/2026 - 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.



CEM-D310 -MID

Three-phase electricity meter with indirect measurement /5A and/or 1A.

Code: Q23602.

Specifications

AC power supply

Installation category	CAT III 300 V
Consumption	< 0.5 W, < 2 VA
Frequency	50 ... 60 Hz
Nominal voltage	3 x 127/220 ... 3 x 230/400 V ~ ± 20 %

Mechanical characteristics

Size (mm) width x height x depth	71.5 x 90 x 74 (mm)
Envelope	PC+ABS
Fastening	DIN rail (IEC 60715)
Weight (kg)	0,38

Environmental characteristics

Protection class	IP 51 (instaled) IP 40 (terminal area)
Relative humidity (without condensation)	5 ... 95 %
Storage temperature	-40 .. +85 °C
Working temperature	-40 ... +70 °C

Current measurement circuit

Consumption	< 1 VA
Reference current (Iref)	.../5 A (5A)
Minimum current measurement	.../5 A (0.05A)
Transition current	0.250 A

Voltage measurement circuit

Nominal voltage	3 x 127/220 ... 3 x 230/400 V ~ ± 20 %

User interface

LED	2 LED: kWh: 4000 imp/kWh, kvarh: 4000 imp/kvarh
Keyboard	2 Keys
Display type	LCD
Maximum value	4294967 kWh

Standards

Standards	IEC-62053-21; IEC 62053-23; IEC 62053-52; IEC 62052-11; UNE-EN 50470-3; MID (EU Directive 2014/32/EU on Measuring Instruments Annex II, Module B

Digital transistor outputs



CEM-D310 -MID

Three-phase electricity meter with indirect measurement /5A and/or 1A.

Code: Q23602.

Type	Optocoupler
Pulse output, time period (Ton / Toff)	Ton: 40 ms / Toff: 64.34 ms
Maximum current	≤ 27 mA
Maximum voltage	≤ 27 V

Measurement accuracy

Reactive energy measurement (kvarh)	Class 2 (IEC 62053-23)
Active energy measurement (kWh)	Class B (UNE-EN-50470)

CEM-D300

Three-phase indirect energy meter

CODE	TYPE	Measurement Range (V)	Measurement Range (A)	Transistor output	Certification	Módules	Digital inputs	Communications	Protocol
Indirect three-phase									
Q23601.	CEM-D310	3x127(230)...3x230(400)V	.../5A o .../1A	1	IEC	4			
Q23602.	CEM-D310 -MID	3x127(230)...3x230(400)V	.../5A	1	MID	4			
Q23611.	CEM-D311	3x127(230)...3x230(400)V	.../5A o .../1A		IEC	4	2	RS-485	Modbus/RTU
Q23612.	CEM-D311 -MID	3x127(230)...3x230(400)V	.../5A		MID	4	2	RS-485	Modbus/RTU
Q23621.	CEM-D312	3x127(230)...3x230(400)V	.../5A o .../1A		IEC	4	2		MBUS
Q23622.	CEM-D312 -MID	3x127(230)...3x230(400)V	.../5A		MID	4	2		MBUS

Creation date: 05/11/2026 - 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.

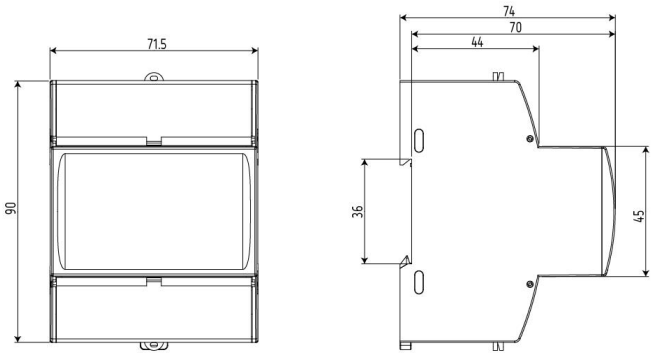


CEM-D310 -MID

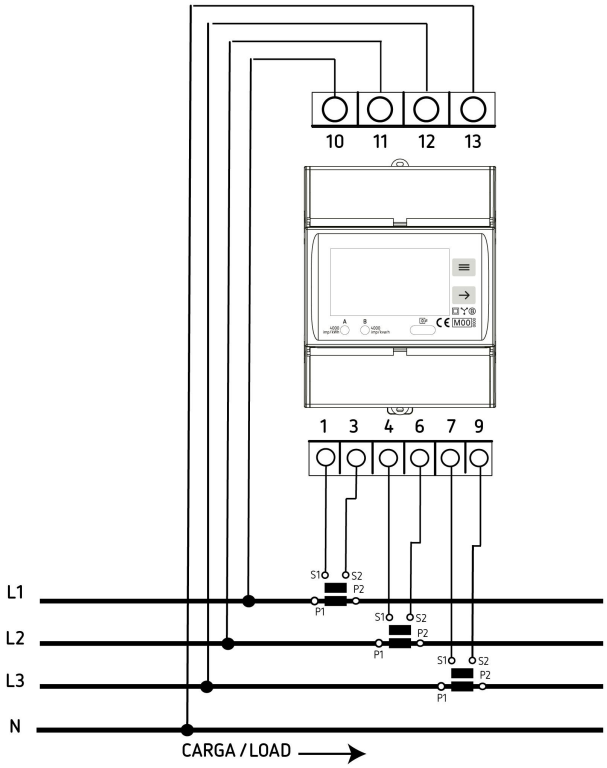
Three-phase electricity meter with indirect measurement /5A and/or 1A.

Code: Q23602.

Dimensions



Connections



Creation date: 05/11/2026 - 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.