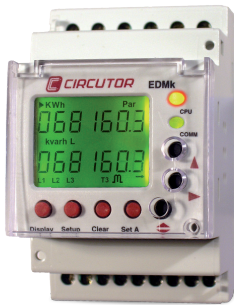


EDMk

Electronic three-phase energy meter with indirect connection, assembly on DIN rail or adaptable to panels



Description

Electronic three-phase meter (active and reactive energy) with indirect connection for DIN rails or adaptable to a panel; 4 quadrants (measures the active (kW·h) and reactive (kvar·h) energy consumed and generated, both capacitive and inductive).

Other features include:

- Resettable partial meters
- Galvanic isolating transformers - ITF
- RS-485 communication, depending on the type
- Two digital outputs with optoisolated transistor
- Informs of possible connection errors via the display.

Applications

- Used as a redundant energy meter to verify the energy allocated by the company. The unit is fully sealable and thus tamper-proof
- Billing meter: meters energy in various tariff categories (up to 3, depending on the type). Used to define the different billing periods or to control the production shifts.
- Cost control to obtain the consumption/unit ratio in industrial processes, etc. This type of control facilitates the definition of more precise cost prices.

EDMk MID



Technical features

Power circuit	230 Vac (-15%...+10%) / 85...265 Vac / 95...300 Vdc	
	Consumption	5 VA
	Frequency	45...65 Hz
Measurement circuit	Rated voltage	300 Vac (P-N) / 520 Vac (P-P)
	Frequency	40...65 Hz
	Consumption of the voltage circuit per phase	0,3 VA
	Consumption of the current circuit per phase	0.3 VA in 5 A or 0.06 VA in 1 A
	Nominal current	.../5 A or .../1 A (isolated input in the ITF type) .../250 mA mod. MC
	Minimum current	110 mA
Maximum meter value	9,999,999 kW	
Class	Class in active energy	Class 1 - EN 62053-21 , Class B - EN 50570-1 (mod. MID)
	Class in reactive energy	Class 2 - EN 62053-23
Output transistor	Optocoupled (collector open) NPN	
	Maximum operating voltage	24 Vdc
	Maximum operating current	50 mA
	Max. impulse frequency	10 imp/s (5 imp/s in manual mode)
	Impulse duration (T on / T off)	50 ms on / 50 ms off
	Output 1	Terminals 9-8
	Output 2	Terminals 7-8
Communications	Type	RS-485 (3 wires)
	Communication parameters	1200-1920 bps, 7/8, no even odd, 1/2
Environmental conditions	Operating temperature	-20 °C...+60 °C
	Humidity (without condensation)	5%...95%
	Maximum altitude	2,000 m
Build features	Minimum display resolution	10 W-h
	Type of box	V0 self-extinguishing plastic
	Protection degree	Fitted unit (front panel): IP 51 Non-fitted unit (sides and rear cover): IP 31
	Dimensions	85 x 52 x 70 mm (3 modules)
	Weight	195 g
Safety	Designed for CAT III 300/520 Vac installations, in accordance with EN 61010 . Double-insulated electric shock protection, class II	
Standards	IEC 664, VDE 0110, UL 94, IEC 801, IEC 348, IEC 571-1, EN 61000-6-3, EN 61000-6-1, EN 61010-1	

EDMk

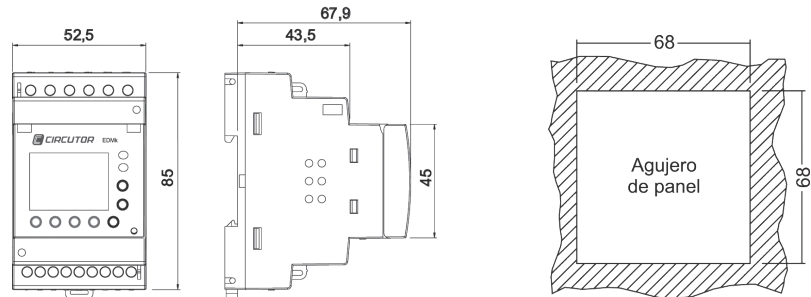
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References

Tipo	Código	Salidas	Comunicaciones	MID	Transformador
EDMk-ITF-RS-485-C2	M31751	2	RS-485	-	.../1 A ó .../5 A
EDMk-ITF-RS-485-C MID	M317C4	1	RS-485	•	.../1 A ó .../5 A
EDMk-MC-ITF-RS-485-C2	M31781	2	RS-485	-	.../250 mA

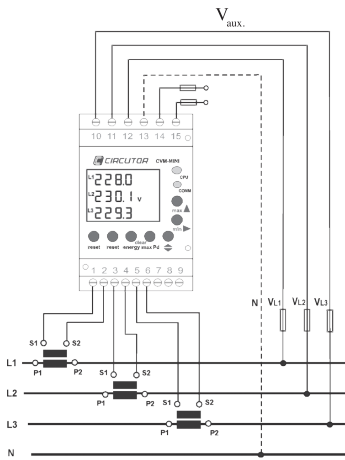
Dimensiones

Dimensions of the drill hole on the panel, 68x68 mm, using the **M5ZZF1** accessory.

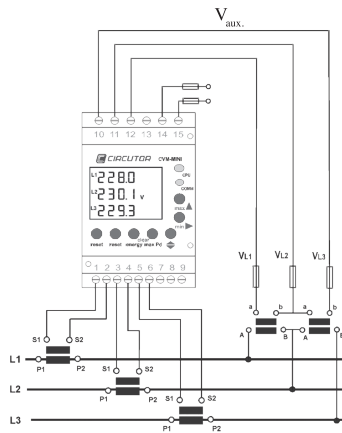


Connections

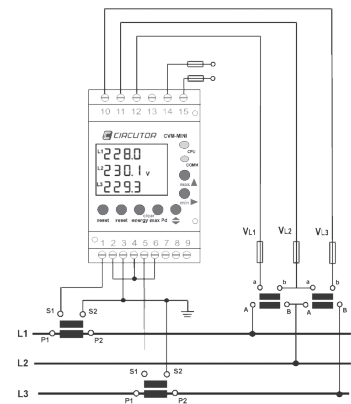
EDMk, 3 or 4 wires (low voltage)



EDMk, 3 wires (2 voltage transformers and 3 current transformers)



EDMk, 3 wires (2 voltage transformers and 3 current transformers)



Coding table

M	3	X	X	X	X	0	0	X	0	0	X	
Code	Internal code						↑	↑				
Power supply voltage	Standard (230 Vac)						0					
	85...285 Vc.a.											
	95...300 Vc.c.						C3					
Others	Standard (No battery)										0	
	With battery (it is used for read energy meters only in event of no main supply)											3