

Single-phase energy meter

with LC display, electronic



Energy meter with LCD display and integrated S0 interface. The S0 interface is a hardware interface for the transmission of measured values in building automation.

Main features

- Single-phase energy meter, 230 VAC 50 Hz
- Direct measurement up to 32 A
- 7-digit LC-Display
- Lead seal possible with cap as accessory
- Precision class 1 according to IEC62053-21
- S0 output according to IEC62053-31



Tecnical data

Precision class	Class 1 according to IEC62053-21
Operating voltage	230 VAC, 50 Hz, Tolerance -20 % / +15 %
Reference/ measurement current	$I_{ref} = 5 \text{ A}$, $I_{max} = 32 \text{ A}$
Starting/minimum current	$I_{st} = 20 \text{ mA}$, $I_{min} = 0.25 \text{ A}$
Power consumption	Active 0.4 W
Measurement	Direct
Counting range	00'000.00...99'999.99 100'000.0...999'999.9
Display	LCD, digits 5 mm high
S0 output	Optocoupler max. 30 V/20 mA and at least 5 V, impedance 100 Ω , impulse range 30 ms
Transmission distance	Maximum 1000 m (with 30 V/20 mA)
Pulses per kWh	LED: 2'000 Imp./kWh
Standard Version	S0 output: 1000 pulses/kWh

Mounting

Mounting	On 35 mm rail, according to EN60715TH35
Screwdrivers	- Primary circuit: Pozidrive no. 1, slotted head no. 1, Tightening torque: 1,2 Nm - S0 output: Pozidrive no. 0, slotted head no. 1, Tightening torque: 0,5 Nm
Primary circuit connections	Max. 6 mm ² , M4
S0 impulse outputs	Max. 2.5 mm ² , M3
Insulation characteristics	- 4 kV / 50 Hz test according to IEC62053-21 for Energy Meter part - 6 kV 1.2 / 50 μ s surge voltage According to IEC62052-11 - Equipment class II
Ambient temperature	-10°...+55 °C
Storage temperature	-30°...+85 °C
Relative humidity	95 % at 25°...+40 °C, without condensation
EMC/interference immunity	- Surge voltage in accordance with IEC61000-4-5 on primary circuit, 4 kV - Surge voltage in accordance with IEC61000-4-5 at S0 impulse outputs, 1 kV - Burst voltage in accordance with IEC61000-4-4, 4 kV - ESD in accordance with IEC61000-4-2, contact 8 kV, air 15 kV

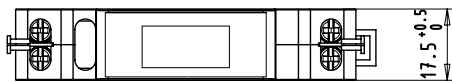
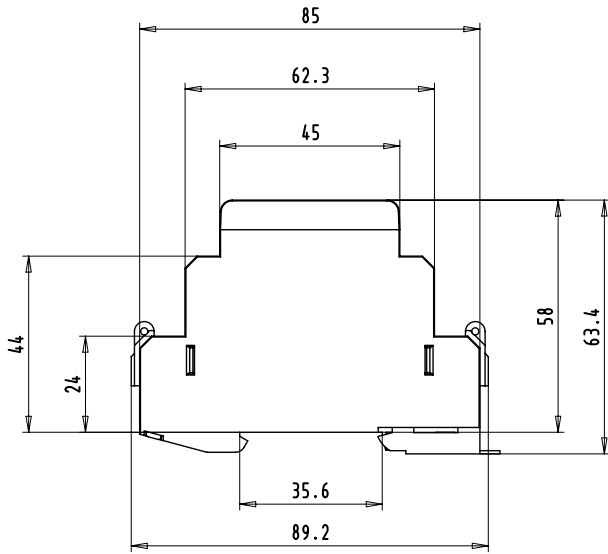
Applications

For precise power management and individual invoicing at jointly used facilities

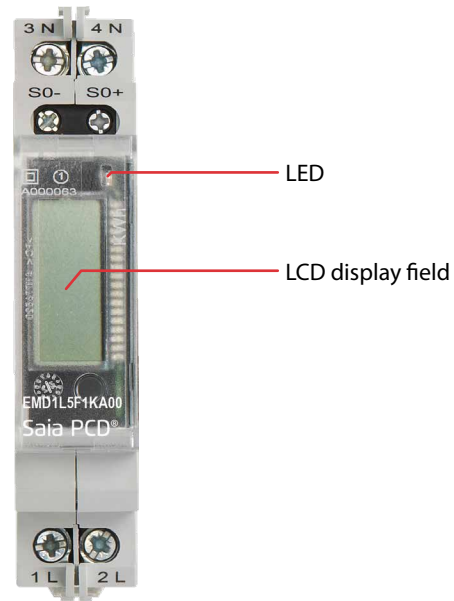
- Precise and secure invoicing of power consumption on camping sites, in marinas, at exhibitions and on street markets
- Measurement of renewable power in the private area, e.g. photovoltaics
- Measurement of power consumption for advertising and lighting

Dimension diagram

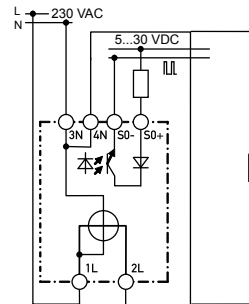
Structure



Display elements, direct measurement



Connection diagram



Order indication

Type	Description
EMD1LSF1KA00	Single-phase energy meter with LC display, electronic
4 104 7420 0	Lead sealing cover (2 units recommended as protection against accidental contact)

Saia-Burgess Controls AG

Bahnhofstrasse 18 | 3280 Murten, Switzerland
 T +41 26 580 30 00 | F +41 26 580 34 99
www.saia-pcd.com

support@saia-pcd.com | www.sbc-support.com