

Single-phase energy meter with S0 pulse output

The S0 interface is a hardware interface for the transmission of measured values via pulses.

Main features

- ▶ Single-phase energy meter, 230 VAC 50 Hz
- ▶ Direct measurement up to 32 A
- ▶ Type B: Display of active power
Type A: Display of active power, voltage and current
- ▶ 7-digit LC-Display with backlight
- ▶ Lead seal possible with cap as accessory
- ▶ Precision class B according to EN50470-3, 1 according to IEC62053-21
- ▶ S0 output

Order Number

Standard Version:	ALD1D5F10KA2A00 ALD1D5F10KB2A00
MID Version:	ALD1D5F10KA3A00 ALD1D5F10KB3A00
Sealing caps:	4 104 7420 0



Technical Data

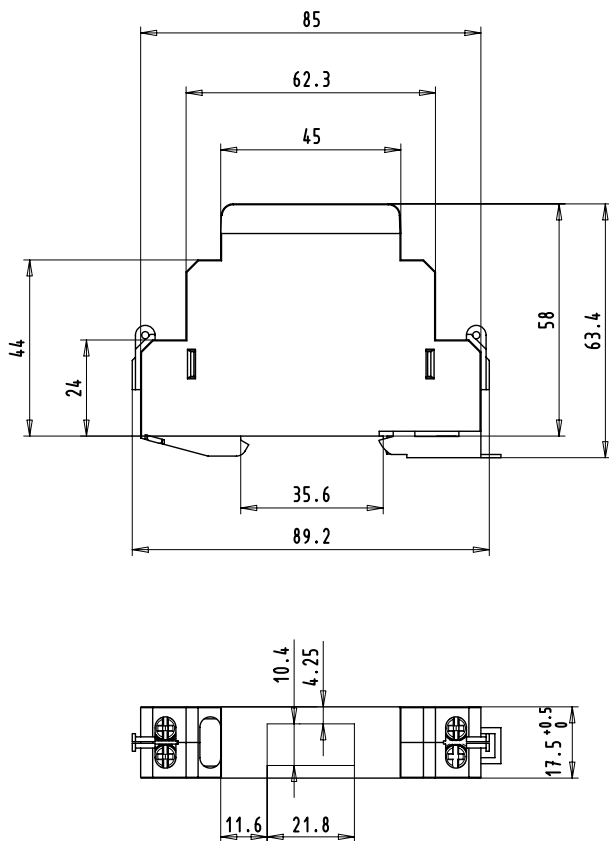
Accuracy class	1 in accordance with IEC62053-21 B in accordance with EN50470-3
Voltage	230 VAC, 50 Hz Tolerance -20 %/+15 %
Reference / maximum current	$I_{ref} = 5 \text{ A}$, $I_{max} = 32 \text{ A}$
Starting / minimum current	$I_{st} = 20 \text{ mA}$, $I_{min} = 0.25 \text{ A}$
Power consumption	Active 0.4 W
Counting range	00'000.00... 99'999.99 100'000.0 ... 999'999.9
Display	LCD with backlight, 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	LC display : 2000 pulses/kWh S0 output : 1000 pulses/kWh

Mounting

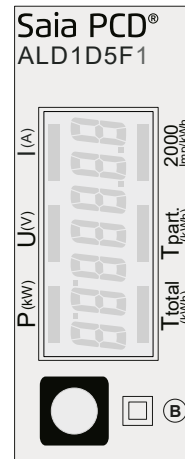
Mounting	On 35 mm rail according to EN60715TH35
Screwdrivers	Primary circuit: Pozidrive no. 1, slotted head no. 1, Tightening torque: 1,2 Nm S0 output: Pozidrive no. 0, slotted head no. 1, Tightening torque: 0,5 Nm
Primary circuit connections	Max. 6 mm ² , M4
S0 impulse outputs	Max. 2.5 mm ² , M3
Insulation characteristics	- 4 kV / 50 Hz test in accordance with VDE0435 - 6 kV 1.2 / 50 μ s surge voltage in accordance with IEC255-4 - Equipment class II
Ambient temperature	-25 °C...+55 °C
Storage temperature	-30 °C...+85 °C
Environment	Mechanical M2 Electromagnetic E2
Relative humidity	75 % without condensation
EMC / resistance to interference	- 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

Dimension diagram

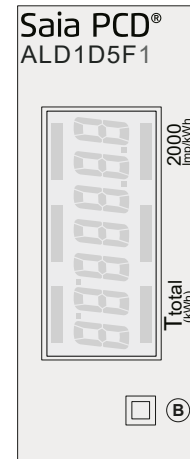
Structure



Display elements, direct measurement



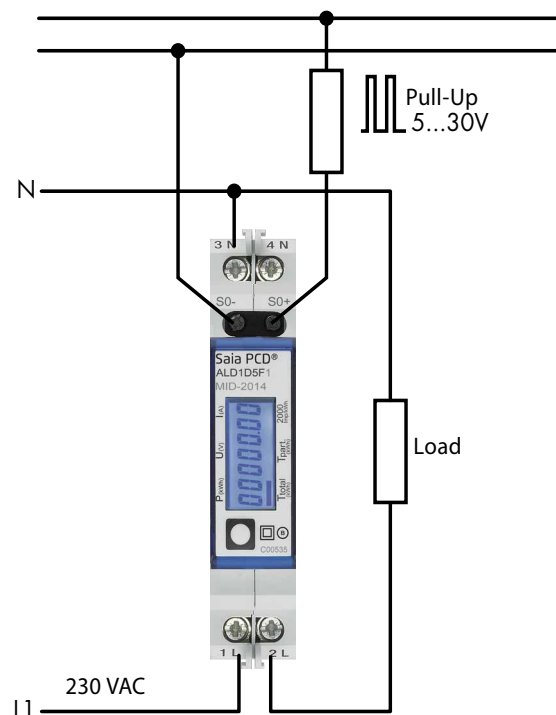
ALD1D5F10KAxA00



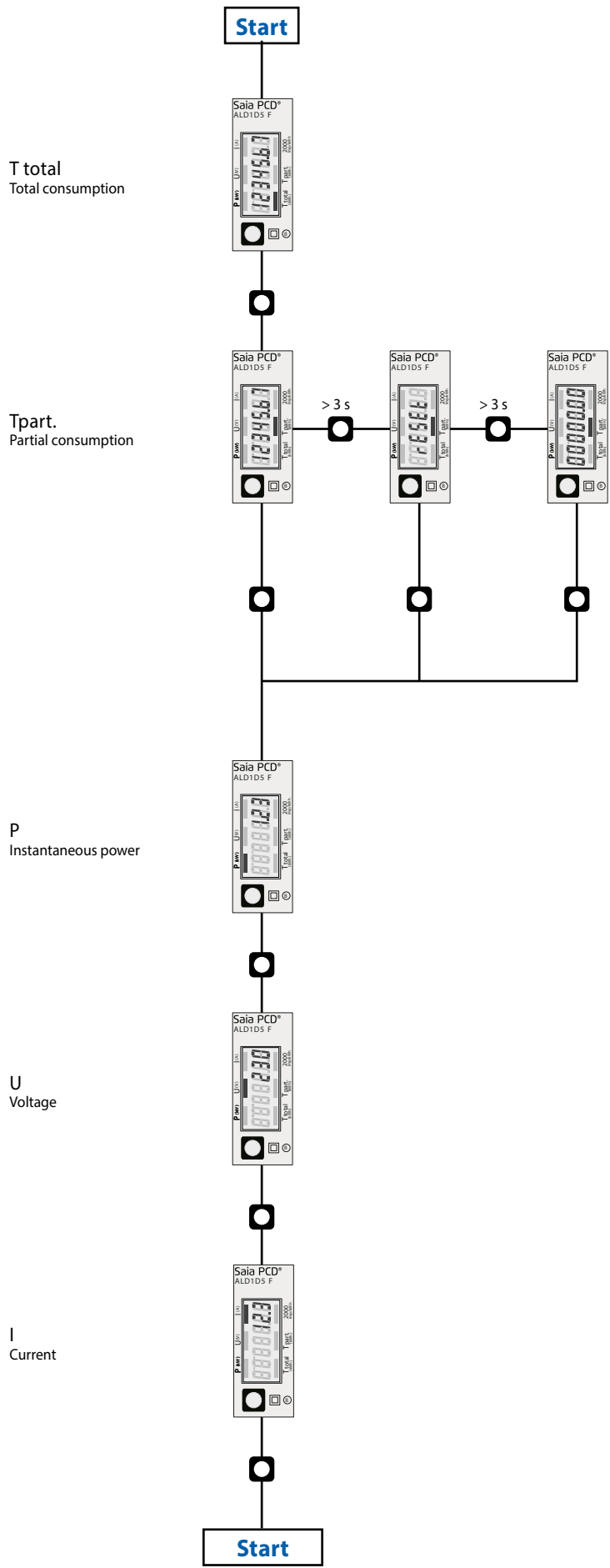
ALD1D5F10KBxA00

- ▶ T total (kWh) Indicates the total consumption
- ▶ T part (kWh) Indicates the partial consumption. This value can be reset
- ▶ P (kW) Indicates the instantaneous power
- ▶ U (V) Indicates the voltage
- ▶ I (A) Indicates the current
- ▶ 2000 pulses/kWh Pulsates according to the amount of used power. Error indication (Line 1L/2L inverted) pulsating with 600/600 ms

Connection diagram



Menu to display the value on LCD (only for the types: ALD1D5F10KAxA00)





ALD1D5F10KA2A00*



ALD1D5F10KA3A00



ALD1D5F10KB2A00*



ALD1D5F10KB3A00



4 104 7420 0

Order details

Type	Short description	Description	Weight
ALD1D5F10KA2A00*	Single-phase energy meters with S0 pulse output for direct measurement, 230 VAC - 50 Hz	Single-phase energy meter with LCD display S0 pulse output = 1'000 pulses/kWh I _{max} = 32 A, 1 tariff display of active power, voltage and current	89 g
ALD1D5F10KA3A00	Single-phase energy meters with S0 pulse output for direct measurement, 230 VAC - 50 Hz	Single-phase energy meter with LCD display S0 pulse output = 1'000 pulses/kWh I _{max} = 32 A, 1 tariff display of active power, voltage and current according to MID directive	89 g
ALD1D5F10KB2A00*	Single-phase energy meters with S0 pulse output for direct measurement, 230 VAC - 50 Hz	Single-phase energy meter with LCD display S0 pulse output = 1'000 pulses/kWh I _{max} = 32 A, 1 tariff	89 g
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4 104 7420 0	Accessories for energy meters	Lead sealing cap for energy meters AAD1 and ALD1	1 g

* Outphased (no longer produced)

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