

Electrical Energy Meter with integrated S0-interface EEM400-D-P

Electrical energy meter with LCD display and integrated S0 interface. The S0 interface (pronounced S-O-interface) is a hardware interface for the transmission of measured values in building automation.

Main features:

- 3-phase energy meter, 3 × 230/400 VAC 50 Hz
- Direct measurement up to 65 A
- Display of active power, voltage and current for every phase
- Display of active power for all phases
- S0 output
- 7-digits display for 1 or 2 tariffs
- Lead seal possible with cap as accessory
- Accuracy class B according to EN50470-3, accuracy class 1 according to IEC62053-21

Order Number

Standard Version: EEM400-D-P MID Version: EEM400-D-P-MID



Technical data

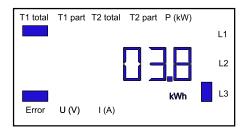
Precision class	B according to EN50470-3, 1 according to IEC62053-21
Operating voltage	3 × 230 / 400 VAC, 50 Hz
	Tolerance -20%/+15%
Reference/ measurement current	$I_{ref} = 10 \text{ A}, I_{max} = 65 \text{ A}$
Starting/ minimum current	$I_{st} = 40 \text{ mA}, I_{min} = 0.5 \text{ A}$
Power consumption	Active 0.4 W per phase
Counting range	00 ⁻ 000.0099 ⁻ 999.99 100 ⁻ 000.0999 ⁻ 999.9
Display	LCD backlit, digits 6 mm high
Display without mains power	Capacitor based LCD, max. 2 times over 10 days
S0 output (interface)	Optocoupler max. $30V/20\text{mA}$ and at least $5V$, impedance 100Ω , pulse width 30ms
Transmission distance, S0 output	Max. 1000 m (at 30 V / 20 mA)
Pulses per kWh	LED: 100 pulses/kWh
	S0 output: 1000 pulses/kWh

Mounting

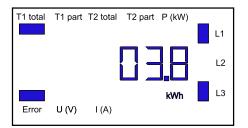
Mounting	On 35 mm rail, according to EN60715TH35
Terminal connections main circuit	Conductor cross-section 1.516 mm ² , screwdriver Pozidrive no. 1, slot no. 2, torque 1.52 Nm
Terminal connections control circuit	Conductor cross-section max. 2.5 mm², screwdriver Pozidrive no. 0, slot no. 2, torque 0.8 Nm
Insulation	4 kV / 50 Hz test according to VDE0435
characteristics	6 kV 1.2/50 μs surge voltage according to IEC255-4
	Device protection class II
Ambient temperature	−25°+55 °C
Storage temperature	−30°+85 °C
Relative humidity	95% at 25°+40°C, without condensation
EMC/interference immunity	Surge voltage according to IEC61000-4-5 at main circuit, 4 kV
	Burst voltage according to IEC61000-4-4, 4 kV
	ESD according to IEC61000-4-2, contact 8 kV, air 15 kV

Error display

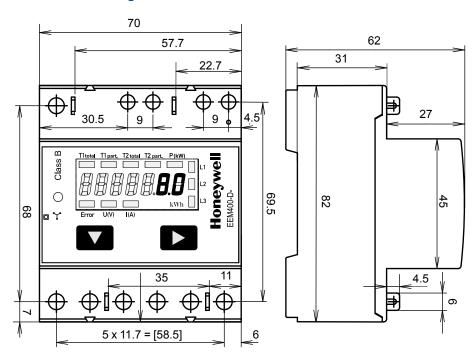
Example: Connection error at L3



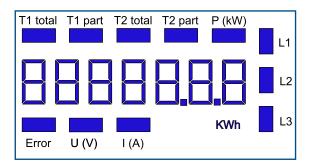
Example: Connection error at L1 and L3



Dimension drawings



Display elements, direct measurement

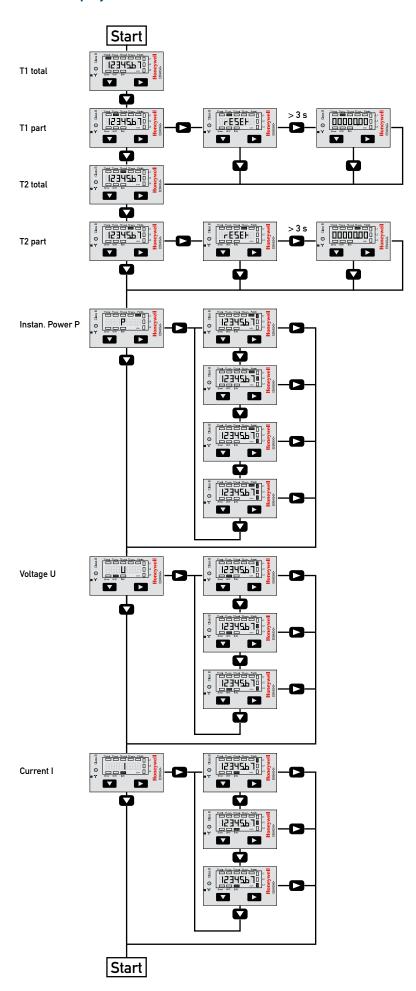


■ T1 total (kWh) Indicates the total consumption for tariff 1 ■ T1 part (kWh) Indicates the partial consumption for tariff 1. This value can be reset ■ T2 total (kWh) Indicates the total consumption for tariff 2 ■ T2 part (kWh) Indicates the partial consumption for tariff 2. This value can be reset ■ P (kW) Indicates the instantaneous output per phase or for all phases ■ U (V) Indicates the voltage per phase ■ I (A) Indicates the current per phase Indicates the unit kWh for display of ■ kWh consumption Whenever the display shows P, U, I or Error. ■ L1/L2/L3 The corresponding phase will be indicated ■ Error When phase is absent or current direction is

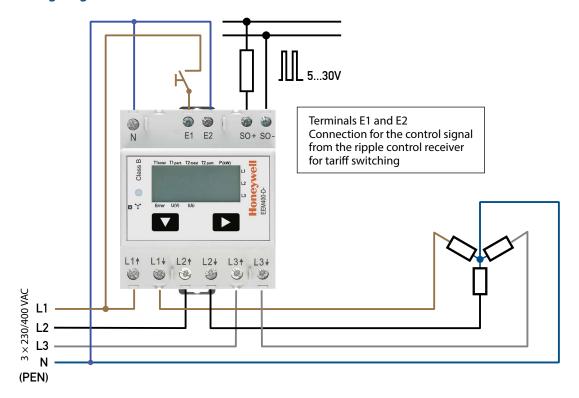
indicated

wrong. The corresponding phase will also be

Menu to display the values on the LCD



Wiring diagram



Honeywell

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