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

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 measuring 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
Sealing caps: EEM400-SEALCAP
(Bulk with 20 units)

MOUNTING
- On 35 mm rail, according to EN60715/H35

TERMINAL CONNECTIONS
MAIN CIRCUIT
- Conductor cross-section 1.5...16 mm², screwdriver Pozidrive no. 1, slot no. 2, torque 1.5...2 Nm

CONTROL CIRCUIT
- Conductor cross-section max. 2.5 mm², screwdriver Pozidrive no. 0, slot no. 2, torque 0.8 Nm

INSULATION
- Characteristics
  - 4 kV/50 Hz test according to VDE 0435 for energy meter part
  - 6 kV 1.2/50 μs surge voltage according to IEC255-4
  - 2 kV/50 Hz test according to VDE 0435 for interface
  - Device protection class II

AMBIENT TEMPERATURE
- -25 °C...+55 °C

STORAGE TEMPERATURE
- -30 °C...+85 °C

RELATIVE HUMIDITY
- 75 % without condensation
- 95 % at 25 °C...+40 °C, without condensation

ENVIRONMENT
- Mechanical M2
- Electromagnetic E2

EMC/INTERFERENCE IMMUNITY
- Surge voltage according to IEC61000-4-5 at main circuit, 4 kV
- Burst voltage according to IEC61000-4-4, at main circuit 4 kV
- ESD according to IEC61000-4-2, contact 8 kV, air 15 kV

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 Current (max. / min.) 65 A / 0.5 A
- Starting Current 40 mA
- Maximum 2 times during 10 days
- Power Consumption Active 0.4 W per phase
- Counting Range 00000.00...99999.99
  - 100000.0...999999.9
- Display Backlit LCD, 6 mm high digits
- Display without mains voltage Capacitor-aided LCD
- SO Output (Interface) Optocoupler max. 30 V / 20 mA and at least 5 V, impedance 100 Ω, pulse width 30 ms
- Transmission distance, SO output Max. 1000 m (at 30 V / 20 mA)
- Pulses per KWh
  - LED: 1000 Imp./kWh
  - SO output: 1000 pulses/kWh
DISPLAY ELEMENTS, DIRECT MEASUREMENT

- **T1 total**: Shows the total consumption tariff 1 (kWh)
- **T1 part**: Shows the partial consumption for tariff 1 (kWh), this value can be reset
- **T2 total**: Shows the total consumption tariff 2 (kWh)
- **T2 part**: Shows the partial consumption for tariff 2 (kWh), this value can be reset
- **P (kW)**: Shows the instantaneous power per phase or for all phases
- **U (V)**: Shows the voltage per phase
- **I (A)**: Shows the current per phase
- **kWh**: Shows the unit kWh for consumption display
- **L1 / L2 / L3**: For P, U, I or error message display, the corresponding phase will be indicated
- **Error**: In the absence of phase or incorrect current direction. The corresponding phase will also be indicated.

DIMENSION DIAGRAM

ERROR DISPLAY

Example: Connection error at L3

Example: Connection error at L1 and L3
Menu to display the values on the LCD

- T1 total
- T1 part
- T2 total
- T2 part
- Instant. Power P
- Voltage U
- Current I

Start

> 3 s

| 3 |
**ACCESSORIES**

<table>
<thead>
<tr>
<th>ORDER NO.</th>
<th>Sealing cover for 3-phase Honeywell energy meter EEM400</th>
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</thead>
<tbody>
<tr>
<td>EEM400-SEALCAP</td>
<td>EEM400 with assembled sealing cover</td>
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</tbody>
</table>

4 units are recommended for contact protection.

**EAC**

EAC Mark of Conformity for Machinery Exports to Russia, Kazakhstan or Belarus.

**WIRING DIAGRAM**

Terminals E1 and E2
Connection for the control signal from the ripple control receiver for tariff switching

5…30 V

3 × 230/400 VAC

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