**COUNTIS E4x**

Active energy meters
three-phase - via CT up to 6000 A

Function

The COUNTIS E4x is a modular active and reactive electrical energy meter displaying the energies and active power consumed (kWh, kVARh and kW) directly on its backlit LCD display. It is designed for three-phase load metering with connection via CT and is suitable for applications of up to 6000 A (3000 A for MID).

COUNTIS E42, E44 and E46 are MID certified.

Common characteristics

- Measurement accuracy: 1 % / 0.5%(MID).
- Backlit LCD display.
- Detects connection errors.

Advantages

RS485 communication (MODBUS or M-BUS) or pulse output

To enable the remote reporting of energy consumption, COUNTIS E4x are provided with either a pulse output or an RS485 communication output, with MODEBUS or M-BUS protocol.

In addition to their reporting functions, COUNTIS E4x with RS485 can be configured remotely and enable access to multi-measurement values.

Detection of connection errors

The product is protected against phase/neutral inversion and detects wiring errors. This simplifies the installation and commissioning, thereby reducing associated costs, and ensures that the device operates correctly.

MID certified B+D module

COUNTIS E products with MID certification provide the guaranteed accuracy required for applications in which sub-billing of the electrical energy consumed is necessary. “Module B+D” certification guarantees that the design and manufacturing process of products are approved by an accredited laboratory.

Bi-directional metering

(available on E43 and E45)

This function is for metering energy production or energy consumption.

Multi-measurement and load curve

Display of electrical values (I, U, V, P, Q, S, PF) and load curve over a 7 day period via communication.

### Models and Key functions

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<th>Key functions</th>
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<td>E40</td>
<td>Pulse output</td>
</tr>
<tr>
<td>E41</td>
<td>Dual tariff (2 partial counters) + Pulse output</td>
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<tr>
<td>E42</td>
<td>Dual tariff + MID + Pulse output</td>
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<tr>
<td>E43</td>
<td>Dual tariff + RS485 MODBUS communication</td>
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<tr>
<td>E44</td>
<td>Dual tariff + RS485 MODBUS communication + MID</td>
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<tr>
<td>E45</td>
<td>Dual tariff + M-BUS communication</td>
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<td>E46</td>
<td>Dual tariff + M-BUS communication + MID</td>
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**The solution for**

- Industry
- Infrastructure
- Data centre

**Strong points**

- RS485 communication (MODBUS or M-BUS) or pulse output
- Detection of connection errors
- MID certified B+D module
- Bi-directional metering
- Multi-measurement and load curve

**MID certification**

- COUNTIS E comply with the MID directive, guaranteeing accuracy and reliability when metering, an indispensable function for energy billing applications.
- COUNTIS E MID feature tamper-proof components to prevent fraud.

**Conformity to standards**

- IEC 62053-21 class 1
- IEC 62053-23 class 2
- IEC 62053-31
- IEC 62053-11
- EN 50470-1
- EN 50470-3
Single-circuit metering, ensures that the device operates correctly. Neutral inversion and detects wiring errors. This product is protected against phase/detection of connection errors remotely and enables access to multi-counters. COUNTIS E4x with RS485 can be configured.

In addition to their reporting functions, consumption, COUNTIS E4x are provided to enable the remote reporting of energy, RS485 communication (MODBUS or M-BUS).

Advantages

- Backlit LCD display.
- Dual tariff + M-BUS communication + MID
- E46
- Dual tariff + M-BUS communication
- E45
- Dual tariff + RS485 MODBUS communication + MID
- E43
- Dual tariff + RS485 MODBUS communication
- E42
- Dual tariff + MID
- E41

Strong points

- Display of electrical values.
- Multi-measurement and load curve.
- Bi-directional metering.
- Approved by an accredited laboratory.
- Prevents fraud.

Display of electrical values

- Measuring active and reactive electrical energy meters displaying kWh, kVArh and kW directly on its backlit display.
- Multi-measurement and load curve.

References

<table>
<thead>
<tr>
<th>Type</th>
<th>COUNTIS E40 Reference</th>
<th>COUNTIS E41 Reference</th>
<th>COUNTIS E42 Reference</th>
<th>COUNTIS E43 Reference</th>
<th>COUNTIS E44 Reference</th>
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<td>4850 3017</td>
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<td>Via CT - Dual tariff + MID</td>
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<td>Management software for COUNTIS</td>
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(1) 4 tariffs through RS485 communication.