



# Eco CountSL

DIN rail meter



## Your benefits

- Proven measurement method:  
**Energy meter for maximum performance with high measurement stability and durability**
- Large graphic LCD display with LED backlighting:  
**Easy reading of measured values and settings with excellent visibility of the digits**
- Flexibly configurable:  
**Transducer ratio, pulse output**

## Applications

- Measurement of electrical energy in industry, ventilation, and heating systems
- Cost center accounting
- Building management systems
- Power monitoring and energy management

## Properties

- Operating voltage 3 x 230/400 V AC, 50 Hz
- Direct measurement version or current transformer version
  - Direct connection up to 85 A
  - 1 or 5 A current transformer connection
- S0 pulse output for active energy
- 8-digit display with three decimal places 00000.000 kWh
- Accuracy class B (+/-1%) for active energy EN 50470-1, -3
- Control input for tariff switching (HT/NT)
- Display data: active, apparent, and reactive power, power factor, voltage, mains frequency, current (total and per phase)
- Bidirectional meter (bidirectional)
- Alarm function with configurable threshold values
- DIN rail mounting
- Housing: IP20, dimensions (LxWxD) 90x90x60 mm, installation width 4 TE
- M-Bus interface according to EN 13757-2, -3
- **CE** Conformity according to MID module D for billing purposes ex works

# Technical Data

Electrical		
Measurement accuracy	Active energy: Reactive energy:	Class B (1%) according to EN50470-3 Class 2 (2%) according to EN62053
Operating voltage	Three-phase 3x400/230 V AC +/- 10%	
Maximum current	Direct-reading meters: Transformer meters:	85 A 6 A
Start-up current	Direct-reading meters: Transformer meters:	2 mA 2 mA
Internal power consumption	Voltage path: Current path transformer meters:	0.6 VA / 0.5W per phase 0.6 VA / 0.5W per phase
Mains frequency	Nominal frequency	50 Hz +/- 2%
Tariff switching	Switchover voltage	230 V AC
Data retention	voltage-free	in EEPROM, minimum 10 years

Current and voltage connection	
Current path – connection cross-section	2.5–25 mm <sup>2</sup>
Recommended torque	0.4 Nm
Transducer meter: Connection crosssection Recommended torque	0.5–6 mm <sup>2</sup> 0.4 Nm
Backup fuse	Direct-reading meters max. 85 A Transformer meters max. 6 A

Adjustable transformer ratios	
Current transformer 5/1 A	1 to 6'000

S0 pulse output	
Standard	EN62053-31
Switching voltage/current	Switching voltage/current Max. 32V AC/DC, max. 100 mA
Output	Potential-free
Pulse rate per kWh/kvarh	Direct-measurement meter: 1,000 pulses/kWh or pulses/kvarh Transformer meter: 10,000 pulses/kWh or pulses/kvarh
Pulse length	30 ms
Standard assignment	Active energy import

## Adjustable pulse output

Instead of active energy pulse output, an alarm output with threshold value detection	Active power PSUM, threshold value exceeded Active power PL1, threshold value exceeded Active power PL2, threshold value exceeded Active power PL3, threshold value exceeded Total current ISUM, threshold value exceeded Current IL1, threshold value exceeded Current IL2, threshold value exceeded Current IL3, threshold value exceeded Active power P+, consumption Active power P-, supply Failure on one of the three phases Current IN, threshold value exceeded (direct measurement version only)
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## Display

LCD display	8 digits with three decimal places 99999.999 Shifts with increasing consumption until 99999999 is displayed
Details	LCD display with blue backlighting
Dimensions (WxH)	40x30 mm
2 red LEDs	Optical test outputs of the active energy and reactive energy measuring units

## M-Bus

Standard	EN13757-2, -3
Connection cross-section	0.25–1.5 mm <sup>2</sup>
Secondary address	8 digits 00000000–99999999 (identical to meter manufacturer number)
Primary address	0 to 250 (default 0)
Baud rate	300, 600, 1,200, 2,400, 4,800, and 9,600 baud (default 2,400 baud)
Configuration	Configurable via buttons and software

## Environmental

Operating	-25 °C to + 55 °C
Temperature limit range	-40 °C to + 70 °C
Relative humidity	Condensation of moisture on the device must be prevented.

## Approvals

MID module D	for billing purposes ex works
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## Dimensions and weights

Dimensions (WxHxD)	90x72x62 mm
Mount	35 mm top-hat rail (DIN 60715:2018-07), position independent
Protection	II
Protection type Housing	IP20
Material	Polycarbonate/acrylonitrile butadiene styrene (PC/ABS)
Weight	Direct-reading meter: approx. 260 g Transducer meter: approx. 195 g

## Display data

	Total 3-phase	Per phase	Per tariff
Active energy import (kWh)	■		■
Active power (kW)	■	■	
Apparent power (VA)	■	■	
Reactive power (var)	■	■	
Power factor	■	■	
Voltage (V)		■	
Current (A)	■	■	
Frequency (Hz)	■		

## Safety instructions (transformer meter)

Current transformers must not be operated openly, as high voltages may occur. These can cause personal injury and property damage. In order to achieve the protection against dust and water ingress required by the standard (IP 51, EN 50470-1, section 5.9), the devices may only be used in meter cabinets.

## Transformer ratio

The transformer ratio can only be set once after installation on calibrated/MID conformity-assessed meters. The meter must then be locked and sealed.