



COUNTIS E63

Active energy meters

3 x single-phase - direct 100 A

Single-circuit metering,
measurement &
analysis

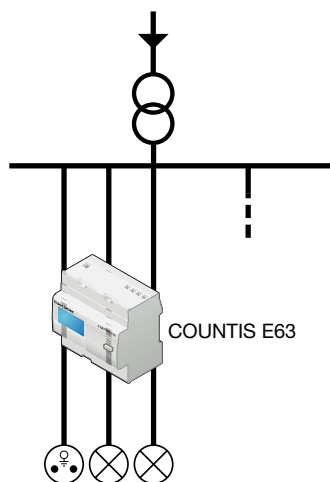


COUNTIS E63

Function

The **COUNTIS E63** is a modular active electrical energy meter which provides metering for three single-phase loads, with direct connection of up to 100 A. It directly displays the total and partial energy and power (kWh and kW) consumed by each single-phase load.

Principle diagram



count_205_a_1_x_cat

Advantages

Compact

Due to the integration of three single-phase meters in the same case (7 modules wide), the COUNTIS E63 provides significant space-saving.

Advanced multi-measurement functions

Advanced multi-measurement functions are available via RS485 MODBUS communication:

- Instantaneous currents: I1, I2, I3
- Instantaneous voltages: V1, V2, V3
- Instantaneous power: 3P, 3S
- Instantaneous power factors: 3PF
- Load curves for each of the 3 phases:
Viewing of average positive active power consumption over a programmable period.

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.

The solution for

- > Data centres
- > Infrastructure



Strong points

- > Compact
- > Advanced multi-measurement functions
- > Detection of connection errors

Conformity to standards

- > IEC 62053-21 class 1
- > IEC 62053-31
- > IEC 62053-11



Management software

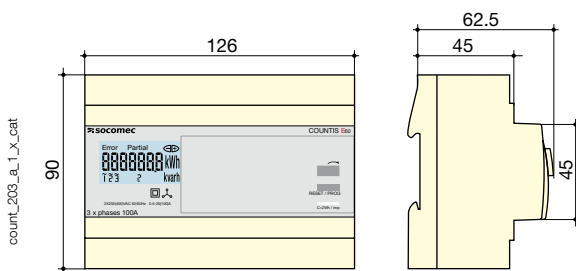
- > To get the most effective use from your Socomec measurement and metering devices, we offer a range of dedicated software tools. See page 140.

Front panel



1. Backlit LCD display
2. Navigation key
3. Reset key
4. Metrological LED

Case



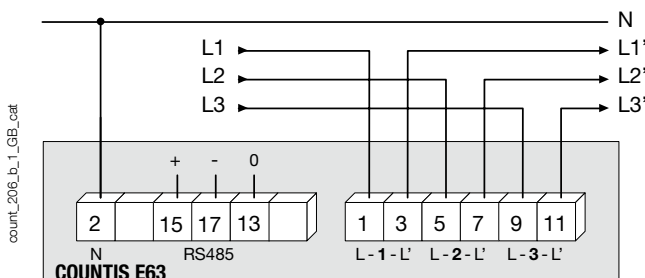
Type	modular
Number of modules	7
Dimensions W x H x D	126 x 90 x 62.5 mm
Case degree of protection	IP20
Front degree of protection	IP51
Display type	backlit LCD display
Rigid cable cross-section	2.5 ... 35 mm ²
Flexible cable cross-section	2.5 ... 35 mm ²
Weight	490 g

Electrical characteristics

Current measurement	
Type	3 x single-phase - direct 100 A
Input consumption	0.5 VA max. per phase
Startup current (I_{st})	80 mA
Minimum current (I_{min})	0.5 A
Transition current (I_{tr})	2 A
Reference current (I_{ref})	20 A
Permanent overload (I_{max})	100 A
Intermittent overload	3000 A max for 10 ms
Voltage measurement	
Range of measurement	230 ... 400 V \pm 20 %
Consumption on inrush (VA)	2
Permanent overload	280 V phase-neutral / 480 V phase-phase
Energy accuracy	
Active (according to IEC 62053-21)	Class 1

Power supply	
Self-supplied	yes
Frequency	50 / 60 Hz
Operating conditions	
Operating temperature	-10 ... 55 °C
Storage temperature	-20 ... 70 °C
Relative humidity	95 %
Communication	
Link	RS485
Type	2 ... 3 half duplex wires
Protocol	MODBUS RTU
MODBUS [®] speed	4800 ... 38400 bauds

Connection



References

Type	3 x single phase - 100 A direct with RS485 MODBUS communication	COUNTIS E63 Reference 4850 3016
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