



3 x 1 phase - Direct 100 A

➤ Function

The **COUNTIS E63** is a communicating active energy meter, with breakdown of consumption per phase. It provides metering of the consumption of single phase loads on a single-phase or three-phase network. It is connected on-line up to 100 A.

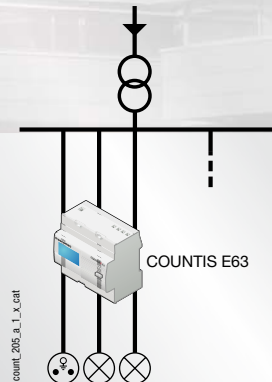
COUNTIS E63 are protected against phase/neutral inversion and detect wiring errors.

➤ Applications

The **COUNTIS E63** is an active energy meter and concentrator that provides a direct reading of the power consumed per phase as well as the total consumed by the 3 phases. It has a JBUS/MODBUS RTU communication output on RS485. A partial meter with reset allows you to meter the energy over a specific period for each of the phases or for the total of all 3 phases.

The **COUNTIS E63** is unidirectional : it only meters the positive active energy (generator mode).

➤ Applications



Due to the integration of 3 single phase meters in the same case (7 modules wide), the **COUNTIS E63** provides a significant space-saving feature.

In addition, it is designed to provide metering of single phase loads up to 100 A.

Its communication output port provides access to advanced multi-measurement functions :

- Instantaneous currents: I1, I2, I3
- Instantaneous voltages: U1, U2, U3
- Instantaneous power: 3P, 3S
- Instantaneous power factors: 3PF
- Load curves for each of the 3 phases : reproduction of average positive active power energy consumption demand for a programmable period.

➤ Conformity to standards

- IEC 62053-21 class 1

➤ Front panel

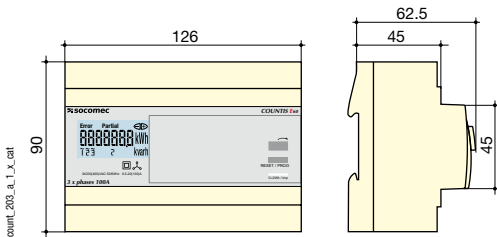


➤ Electrical characteristics

Current measurement	
Type	100 A direct
Input consumption	0.5 VA max. per phase
Startup current (I_{st})	80 mA
Minimum current (I_{min})	0,5 A
Transition current (I_t)	2 A
Reference current (I_{ref})	20 A
Permanent overload (I_{max})	100 A
Short-time over-current	3000 A max for 10 ms
Voltage measurement	
Range of measurement	230 ... 400 V +/- 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
Supply	
Self supplied	Yes
Frequency	50 / 60 Hz

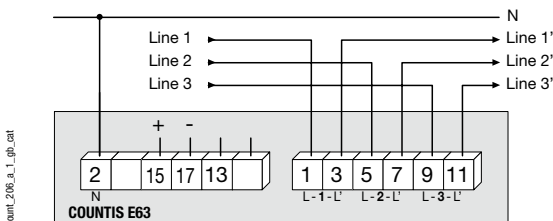
Output (pulsed)	
Number	1
Type of optocoupler	IEC 62053-31 Class A (20 ... 30 VDC)
Fixed weight of impulses	100 Wh
Impulse duration	100 ms
Operating conditions	
Operating temperature	-10 to 55 °C
Storage temperature	-20 to 70 °C
Relative humidity	95 %
Communication	
Link	RS485
Type	2 ... 3 half duplex wires
Protocol	JBUS/MODBUS® in RTU mode
JBUS/MODBUS® speed	3800 ... 38400 bauds

➤ Case



Type	Modular
Number of modules	7
Dimensions W x H x D	126 x 90 x 62.5 mm
Case protection index	IP20
Front protection rating	IP51
Display type	Backlit LCD display
Rigid cable connection section	2.5 to 35 mm ²
Flexible cable connection section	2.5 to 35 mm ²
Weight	490 g

➤ Terminals and connections



➤ References

Type	COUNTIS E63
Reference	Reference
3x 100 A direct with JBUS/MODBUS communication via RS485 - MID ⁽¹⁾	4850 3016
(1) 4 tariffs via RS485 communication.	