

# COUNTIS P43-DC

## Modular DC energy meters

connection via shunts up to 4000 A



count-p\_006.psd

### The solution for

- > Energy
- > Industry
- > Buildings
- > Infrastructure & transport

### Strong points

- > Wide selection of shunts
- > Multi-interfaces
- > Complete ecosystem for easy integration
- > Wide temperature range

### Associated products

- > For a complete ecosystem, combine with a DIRIS Digiware M-70 or D-70 communication gateway.



DIRIS Digiware M-70 & D-70

### Conformity to standards

- > IEC 62053-41
- > IEC 62052-11
- > IEC 61010-1



### Function

**COUNTIS P43-DC** are modular electrical energy meters for direct current (DC), that enable viewing of the different energies consumed and produced, and also of powers and other measurements directly on the backlit LCD display. They connect indirectly via a wide range of measurement shunts.

### Advantages

#### Wide selection of shunts

The range is compatible with measurement shunts ranging from 1 to 4000 A to accommodate the majority of DC loads.

#### Multi-interfaces

COUNTIS P43-DC meters are equipped with:

- A pulse output, enabling energy consumption information to be sent in the form of pulses.
- An RS485 (MODBUS RTU) communication output, which enables all meter data to be read remotely via the communication protocol.

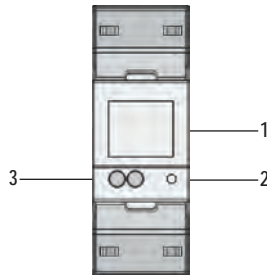
#### Complete ecosystem for easy integration

COUNTIS P43-DC meters are natively compatible with the WEBVIEW energy monitoring software. Thanks to the automatic detection of the meters for quick configuration, this software is very easy to use. It is accessible via a DIRIS Digiware M-70 or D-70 gateway.

#### Wide temperature range

Wide operating temperature range from -40 to +70°C.

## Front panel

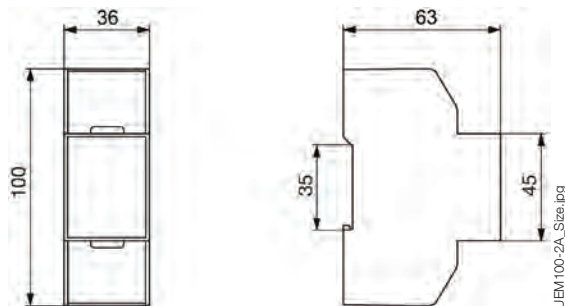


1. Backlit LCD display
2. Metrological LED
3. Buttons

## Electrical characteristics

Current measurement (TRMS)	
Type	Direct current (DC)
Max. consumption	5 VA
Current measurement	via 100 mV shunts from 1 to 4000A
Voltage measurement (TRMS)	
Overvoltage category	300V CAT III - UC1 in accordance with IEC 61010-1
AC voltage (Un)	230 V, Overvoltage category III
Voltage range	5 - 1000 VDC
Transient overvoltage withstand	4.4 kV 1 minute, 6.4kV 1.2/50 µs waveform
Measurement accuracy	
U, V / I / F / P, Q, S / PF	0.5% / 1% / 0.2% / 1% / 1% in accordance with IEC61557-12
Active energy	Class 1 in accordance with IEC 62053-41
Power supply	
Auxiliary power supply	9 - 60 VDC
Max. consumption	5 VA
Pulse output	
Number	1
Type of optocoupler	5-27 VDC - 27 mA max.
Pulse duration	60 / 100 / 200 ms
Pulse output	Configurable: 0.01 / 1 kWh per pulse
Environment	
Operating temperature	-40 to +70°C
Ambient storage temperature	-40 to +75°C
Relative humidity	0 to 95%, condensation-free
Communication	
Link	RS485
Type	2-wire half duplex
Protocol	Modbus RTU
Speed	2.4 / 4.8 / 9.6 / 19.2 kbps

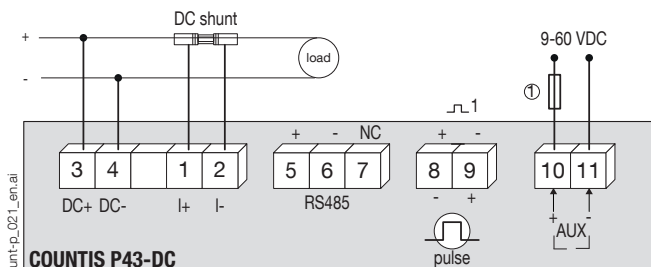
## Dimensions (mm)



Type	modular
Number of modules	2
Front degree of protection	IP 51
Case degree of protection	IP20
Dimensions W x H x D	36 x 100 x 63 mm
Display type	Backlit LCD display
Connection cross-section and torque for measuring terminals (A & V)	0.5...2.5 mm² / 0.2 Nm
Connection cross-section and torque for terminals S0, COM, tariff input	0.5...1.5 mm² / 0.2 Nm

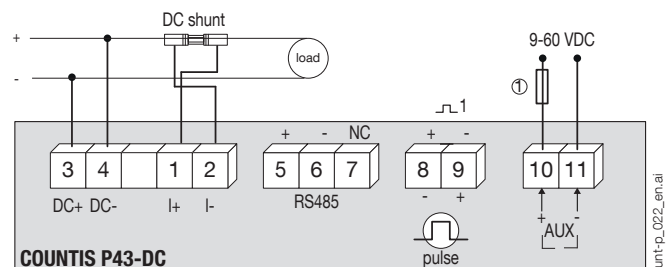
## Connections

### Shunt positive connection:



1. 1 A gG / 1 A class CC fuses.

### Shunt negative connection:



## References

COUNTIS P43-DC		
P43-DC <sup>(1)</sup>	Indirect via 100 mV shunts – 1 pulse output + MODBUS RS485 communication	4850 6000

(1) Available soon. Contact us for more information.