COUNTIS AMd / AMt

GB Operating instructions

Энергетические и телекоммуникационные системы

SOCOMEC
Industrial Switching & Protection Systems

GB

Contents

PRELIMINARY OPERATIONS

For personnel and product safety please read the contents of these operating instructions carefully.
Check the following points as soon as you receive the package:
- the packing is in a good condition,
- the product has not been damaged during transit,
- the product reference number conforms to your order,
- the package contains both the product and the operating instructions.

GENERAL INFORMATION

The Countis system consists of several products designed for active energy metering. Two versions are available for metering on single-phase networks:
- The **AMd**, a single or double rate static energy meter with direct reading in kWh and a direct current input up to 32 A.
- the **AMt**: static energy meter with direct display in kWh and current input via a 5A current transformer (CT).

These products are fully configurable (CT up to 100A [for AMt] and pulse duration [from 600 to 900ms]). They also feature a partial meter, which displays the kWh consumption since the last reset occurred.

NB:
Entry to the configuration menu can only be done via an access code.

PRESENTATION

COUNTIS AMd / AMt SINGLE RATE

① kWh display.

② Flashing LED consumption indicator (10Wh / pulse).

③ Validation / scrolling of parameter settings.

④ Total and partial meter display, or scrolling parameter settings.

COUNTIS AMd DOUBLE RATE

① kWh display.

② Flashing LED consumption indicator (10Wh / pulse).

③ Displays t1 and t2 rate meters. Validation / scrolling of parameter settings.

④ Total and partial meter display, or scrolling parameter settings.

INSTALLATION

CLIMATIC ENVIRONMENT

Note :
Both the AMd and AMt should be fitted onto an EN 50022 DIN rail (DIN 43880).

For optimum operation this device should be used within a temperature range of -5 up to 45° C with a maximum relative humidity of 85 %.

SAFETY INSTRUCTIONS

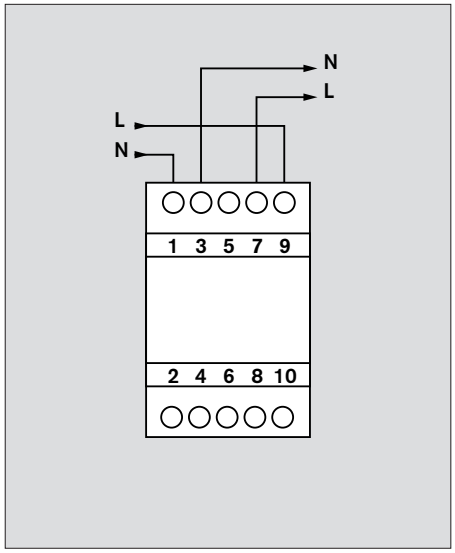
Recommendations :
Avoid installing near equipment liable to cause electro-magnetic interference or subjecting the device to vibrations in excess of 1G with 60Hz frequencies.

To avoid damage to the device please ensure the following points are respected before connecting:
- case indications,
- 50 or 60Hz network,
- 230V AC voltage +/- 20 %,
- 32A and 7A maximum current for the AMd and AMt respectively.

CONNECTIONS TO THE NETWORK

Note:
If the CT input connections are reversed, or if the voltage and current inputs do not correspond to the correct phases, energy metering is prevented and flashing arrows ▼ are displayed.

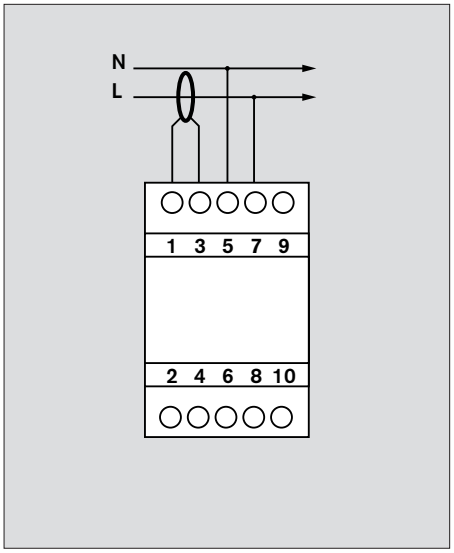
AMd



For current input:
- from 1 to 25A: 4mm² minimum,
- from 25 to 32A: 6mm² minimum.

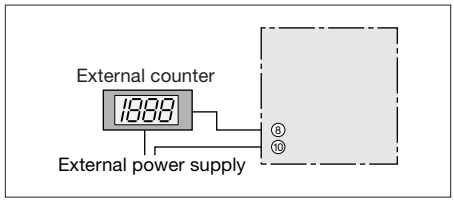
Install 32A-fuse protection.

AMt

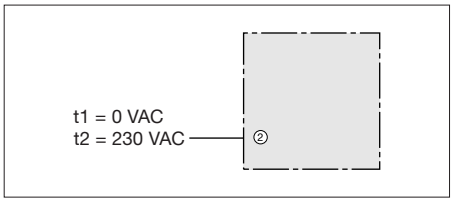


Install 500mA-fuse protection.

CONNECTING PULSE OUTPUT



RATE INPUT (t1 / t2)



CONFIGURATION

Note :
The device will automatically leave the configuration menu if no buttons are pressed for a period of 25 seconds.

Note :
Press the ▼ button for a prolonged period to scroll rapidly through the configuration screens. Press for a short period to scroll through each screen one-by-one.

AMd / AMt

KEY	INSTRUCTION
▼ + ↵	For 3 seconds to access access-code entry (CdE).
▼	To enter code **167**.
↵	To accept code and access CT configuration for the AMt, or directly access pulse duration (PLS) for the AMd.
▼	To select CT primary between 25, 40, 50, 60, 75 and 100A.
↵	To accept value and pass to pulse duration (PLS).
▼	To programme pulse duration from 60 to 900ms.
↵	To accept value and pass to partial meter zero reset (rSET).
▼	To select «YES» and reset to zero (or the contrary).
↵	To accept zero reset and return to CT (AMt) or PLS (AMd).
▼ + ↵	To confirm and quit programming.

TECHNICAL CHARACTERISTICS

ENCLOSURE

Connection: via 1 to 10mm² terminal shrouds	
Weight:	300 g
Size:	3 x 17.5 mm modules

FRONT PANEL

Green LCD / 6 + 1 digits (999 999,9 kWh)	
Digit height:	8 x 4 mm
Accuracy:	+/- 1 digit
Protection index:	IP 40

INPUTS

CURRENT: AMd	
Direct connection up to 32A	
Input consumption:	≤ 2.5VA to Imax
Minimum measured current:	100 mA
Overload:	30 Imax for 10 ms
CURRENT: AMt	
Via transformer with: • configurable primary: • non-insulated secondary:	 25, 40, 50, 60, 75 and 100 A 5A
Input consumption:	≤ 1 VA to Imax
Minimum measured current:	15 mA
Overload:	20 Imax for 500 ms
VOLTAGE	
Measurement range:	from 195 to 276 V AC (90 to 120 V AC on request)
Permanent overload:	276 V AC (phase/neutral)
Consumption:	≤ 15 VA

Note :
The device is self-supplied from the voltage input.

ACCURACY

Active energy:	IEC 61036 / Class 1

PULSE OUTPUT

AMd / AMt SINGLE RATE	
Reed relay (100 V DC - O.5A - 12 VA)	
Maximum tripping number:	5 x 10^7 at 10 V DC/10 mA
AMd / AMt DOUBLE RATE	
Optocouples:	40 DVC - 200 mA
Pulse duration:	60 to 900 ms
Pulse output fixed at 100 Wh	

OPERATING CONDITIONS

Operating temperature:	-5 up to 45°C
Storage temperature:	-20 up to 70°C
Relative humidity:	85 %

STANDARDS

Active energy accuracy:	IEC 61036 Class 1
CE marking:	EN 50081-2 EN 50082-2 IEC 1000-4/2-3-4-5-6-8-11
Environment:	IEC 60068-2-11/30

COUNT 031 B

RUSSIA

ООО "Энергетические и Телекоммуникационные Системы"
Тел./факс: (495) 981-13-66
http://www.entel.ru, E-Mail: sales@entel.ru

Энергетические и телекоммуникационные системы

HEAD OFFICE

SOCOMEC GROUP
Switchgear and UPS
S.A. capital de 11 052 200 €
R.C. Strasbourg 5484500 149 B

SOCOMEC
1, rue de Westhouse - B.P. 10
F - 67235 Benfeld Cedex - FRANCE
Tel. +33 (0)3 88 57 41 41 - Fax +33 (0)3 88 57 78 78

SALES MANAGEMENT DIVISION

SOCOMEC
95, rue Pierre Grange
F - 94132 Fontenay-sous-Bois Cedex - FRANCE
Tel. +33 (0)1 45 14 63 40 - Fax +33 (0)1 48 77 31 12
scp.dcm@socomec.com

SOCOMEC
Industrial Switching & Protection Systems

www.socomec.com