

# AC current source

Current source (phantom load) type Calmet CC11 together with electricity meter tester (type Caltest, Calport and other) is dedicated to test all types of single and three phase electricity meters. Function of load current change enables to test electricity meters on site independent from actual load. Current source can be also used to test devices such as: ammeters, RCD leakage circuit breakers, current transformers, clamps and clamp meters using additional coils.

The CC11 is single phase AC current source in range up to 5A accuracy class 0.2 with signal frequency equal to 50/60Hz like the supply voltage frequency and with phase shift 0° or 180° relative to the supply voltage.

The CC11 enables:

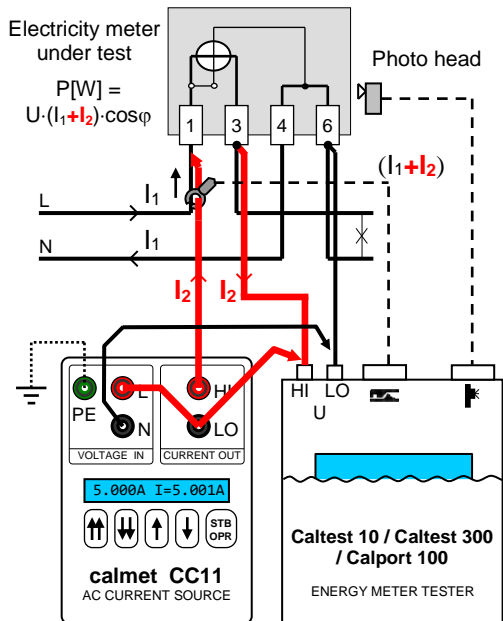
- rough and fine increasing and decreasing of current without necessity to disconnect tested meter and end user from circuit,
- digital measurement of current injected in current circuit of meter,
- rough and fine setting and measurement of current in current circuit of tested devices such as: ammeters, current transformers and other.



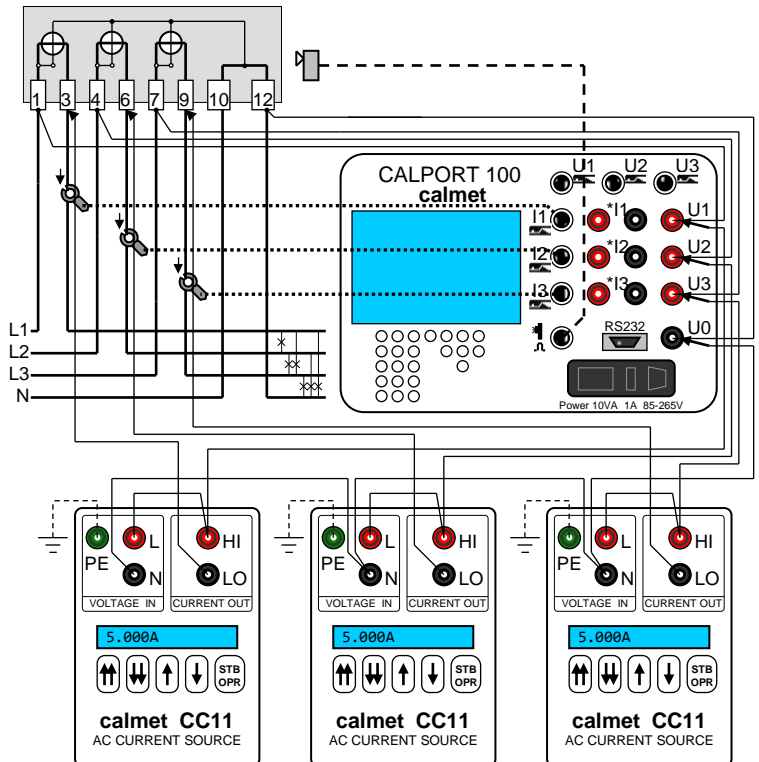
**Calmet CC11**

**calmet CC11**  
**Single phase AC current source**

- Loading of single and three phase electricity meters
- Current setting range from 0.005 to 5.000A
- Digital measurement of output current
- Silent operation and no heating
- No need to disconnect meter and end user from circuit during electricity meter testing on site
- Powering directly from measurement circuit
- Galvanically isolated output
- Accuracy class 0.2 for testing of AC current devices



Measurement system for electricity meter testing on site with CC11 source and tester

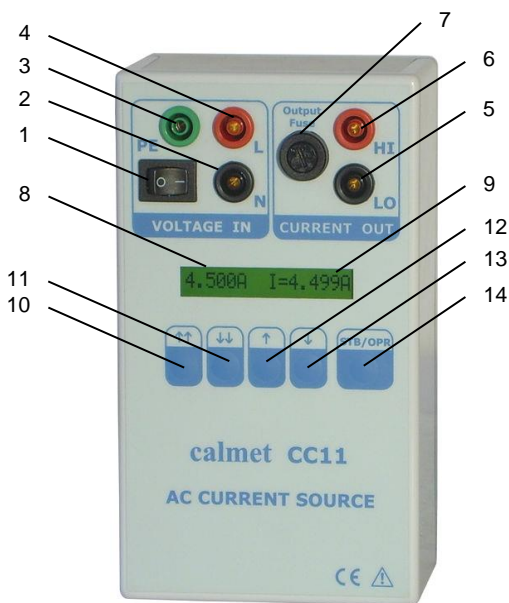


Measurement system for three phase electricity meter testing on site with CC11 sources and CALPORT100PLUS tester

## TECHNICAL PARAMETERS OF Calmet CC11

Parameter	Value <sup>1)</sup>
Current setting range	0.005...5A
Resolution of current setting	0.001A
Current setting error and current measurement error	$\pm 0.2\%$ @ 0.5...5A and $\pm 0.2\%*$ @ 0.005...0.5A
Maximum load	1.5V @ 5A
Phase angle of the output current relative to the supply voltage	$0^\circ \pm 2^\circ$ @ 230V
Frequency	50/60Hz according to the supply voltage
THD of current	according to the supply voltage
Supply voltage	85...264VAC / 45...65Hz / 25VA
Ambient temperature	-10...+60°C operating, -20...+60°C transportation
Dimensions (width/height/depth) and weight	110 / 190 / 80mm and 1.2kg
Measurement Category	300V CAT III acc. to EN 61010-1
Degree of protection	IP40 acc. to EN 60529

<sup>1)</sup> % - related to the measuring value, %\* - related to the measuring final value



### SHORT OPERATION MANUAL

- 1 - Power supply switch
- 2, 3, 4 - L, N, PE terminals of voltage inputs - terminals of power supply voltage
- 5, 6 - HI, LO terminals of current output
- 7 - Fuse socket of current output FF6.3A, 250V, 5x20
- 8 - Display with current setting
- 9 - Display with measured value of current
- 10, 11 - Buttons for rough setting of current with step 0.1A
- 12, 13 - Buttons for fine setting of current with step 0,001A
- 14 - Button STB/OPR Standby (output short circuit)/Operate to OFF/ON switching of output current



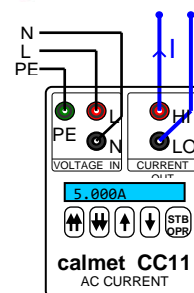
### Calmet CC11 CURRENT SOURCE'S EQUIPMENT

CC11 source's set consists of:

- CC11 AC current source,
- set of safety stackable measurement cables (5units),
- AKD11 accessories for safety cables (6units)  
(safety test clip Kleps (3units), adapter with flexible Cu wire (2units), safety crocodile test clip (1unit)),
- fuse FF6,3A 250V, 5x20 (5units),
- operation manual,
- guarantee certificate,
- calibration certificate.

Optionally for CC11 source are available:

- ZW100/10A coil,
- ZW10/20A coil.



CC11 as a current calibrator for testing

Calmet sp. z o.o.

Kukulcza 18, 65-472 Zielona Gora, Poland

Phone +48 68 324 04 56 Fax +48 68 324 04 57

E-mail: mail@calmet.com.pl Web access: <http://www.calmet.com.pl>