CURRENT CLAMP
C-PV

USER MANUAL

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1 Description

The C-PV clamp is used for I_{sc} DC measurements and for DC measurements of the modules at the input of the inverter.

For the MPI-540-PV meter, connect the clamp via **WAADACPV** adapter.

2 Safety

NOTE!
Do not expose the clamp to water.

3 Operation

To measure the current, open the clamp slightly by turning the clasp, clamp it on the conductor with flowing current and roughly center the conductor relative to the clamp loop.

Correcting zero indication for DC current measurements

- Connect the clamps to the meter, turn on the clamps.
- Use DC ZERO knob to reset the clamps to current indication closest to zero.

The gap (formed by the faces of the core) should be kept perfectly clean.

4 Cleaning and maintenance

NOTE!
Apply only maintenance methods specified by the manufacturer in this manual.

Before cleaning, disconnect the clamp from the tested circuit and the meter. Do not spray the clamps with water.

Remove the dust from the gap with a soft and dry cloth. Periodically wipe the accessible iron part of the jaws with an oil-soaked cloth to prevent possible corrosion.

The clamp may be cleaned with a soft, damp cloth using all-purpose detergents. Do not use any solvents.

5 Dismantling and utilisation

Worn-out electric and electronic equipment should be gathered selectively, i.e. it must not be placed with waste of another kind.

Worn-out electric equipment should be sent to a collection point in accordance with the law of waste electrical and electronic equipment.

Before the equipment is sent to a collection point, do not dismantle any elements.

Observe the local regulations concerning disposal of packages.

6 Reference conditions

a) temperature ..... 23 ± 5°C
b) relative humidity 70%
c) power supply ..... 3 V
d) conductor position ..... centred in the jaws
e) permanent magnetic field ..... <40 A/m (Earth's magnetic field)
f) variable, external magnetic field ..... none
g) external electric field ..... none

7 Technical data

Basic technical data

a) accuracy
- range: **40 A DC** ..... 0…40.0 A DC: ±(2.5% + 0,1 A)
- range: **400 A DC** ..... 0…400 A DC: ±(2.8% + 0,5 A)
- range: **40 A AC** (50/60 Hz) ... 0…40.0 A AC: ±(2.5% + 0,1 A)
- range: **400 A AC** (50/60 Hz) .. 0…400 A AC: ±(2.8% + 0,5 A)

b) output level
- range of 40 A ..... 10 mV/A
- range of 400 A ..... 1 mV/A

c) output impedance ..... 1320 Ω

- When using the clamp with a SONEL meter, total measurement accuracy of the measuring system of the meter and clamp is specified in the manual of a given meter.
- The accuracy of the clamp given in this manual is not the sum of the accuracy of the meter and accuracy of the clamp.

Other technical data

a) insulation type acc. to IEC 61010-1 ..... double
b) measurement category acc. to IEC 61010-1 ..... IV 300 V, III 600 V ..... max. 1000 V DC only for isolated conductors
c) pollution degree 2
d) ingress protection acc. to IEC 60529 ..... IP40
e) power supply ..... 2x AAA 1.5 V battery
f) dimensions ..... 150 × 58 × 35 mm
g) weight ..... 205 g
h) jaws opening distance ..... 32 mm
i) height of open jaws ..... 84 mm
j) maximum diameter of tested cable ..... ∅30 mm
k) length of clamp cable ..... 0.9 m
l) operating temperature ..... 0°C…+50°C
m) storage temperature ..... -20…+70°C
n) operational relative humidity ..... ≤70%
o) storage relative humidity ..... ≤80%
p) altitude a.s.l. ..... ≤2000 m
q) the product meets the EMC requirements according to .. .. IEC 61010-1, IEC 61010-2-032