

BENNING**CM E1 earth measuring clampCME1****Order data**

Order number	473424 CME1
GTIN	2050002078512
Item class	47A

Description**Version:****Measurement functions:**

- **Earth loop resistance measurement RE on multi-earthed earthing systems.**
- **Measurement of leakage, stray and load currents from 0.3 mA - 35 A using the TRUE RMS measuring method.**

Special features:

- **Precise due to TRUE RMS measuring method.**
- **Optical and acoustic alarm function in the case of excessive earthing resistances.**
- **Large measuring clamp diameter of 38 mm.**
- **Measurement memory/data logger for 116 measurements.**
- **Automatic calibration during start-up.**
- **Measurement category: CAT III 300 V.**
- **Supplied in a hard case and with reference resistance loop.**

Feature:

Display range: 9999

Basic accuracy: 1%

AC current: 0.3 mA - 35 A

Resistance: RE loop 0.025 Ω – 1500 Ω

Memory / data logger: HOLD, REC (116 measurements)

Measurement method: TRUE RMS

Max. clamp opening: 38 mm

Measurement category: CAT III 300 V

Advantage:

No need to disconnect the earth conductor (often difficult because of corrosion).

No need to install probes/auxiliary earth electrodes.

Quick and easy measurements.

Safe both for the testing personnel and the electrical installation (earthing is maintained during measurement).

No failures of the electrical installation due to disconnection of the earth electrode.

Function:

- **The clamp has an excitation winding and a sensor winding.**
- **The excitation winding induces a current flow in the enclosed earth conductor via a constant AC voltage U ($f = 3.333$ kHz).**
- **The sensor winding measures the induced current flow.**
- **The BENNING CM E1 measures (calculates) the resistance of the entire earth loop $R_s = U / I$.**

Application:

E.g. electrical installations with parallel earth connections:

Overhead line networks with pole-type earth electrodes.

Lightning protection systems on buildings.

Street lighting, telecommunications applications, wind energy etc.

Supplied with:

- **BENNING CM E1**
- **Carrying case with shoulder strap (10217859)**
- **Reference resistance loop (10217860)**
- **9 V block battery (IEC 6 LR61)**
- **Operating instructions**

Technical description

Power supply	Battery-powered
Number of batteries contained	1
Type of product	Clamp meter