

# DCM300E

## Earth Leakage Clampmeter



- 0,01 mA resolution
- EMC & EN61010-1 compliant
- 30 mA, 300 mA, 30 A & 300 A range
- 40 mm jaw size
- Analogue Bargraph & Digital Display

### DESCRIPTION

The DCM300E is designed mainly to check earth leakage currents. However, the upper range will measure currents of up to 300 A a.c. making it a totally versatile instrument capable of taking most current measurements.

The instrument has four ranges; 30 mA, 300 mA, 30 A and 300 A with a minimum resolution of 0,01 mA on the 30 mA range.

For those hard to read measurements, where there are problems of accessibility or poor lighting, a data hold feature has been incorporated, to aid measurement.

To save battery life when not in use the instrument has an automatic power off feature and will turn itself off if it hasn't taken any readings over a 10 minute period. This totally new clampmeter development ensures that the latest safety design standards EN61010-2-32 and EMC requirements are met. Safety is enhanced with the incorporation of a tactile barrier. Extra insulation has been used around the jaw specifically to reduce the possibility of causing a short circuit between live conductors, as well as protecting the operator from accidentally getting an electric shock.

#### Simply Clamp on

With existing installations especially, by far the simplest and easiest method of checking an installation is with a clamp-on current meter. The clampmeter can be used to locate the fault within the circuit without it being necessary to disassemble the wiring.

### APPLICATION

A typical application for the clamp-meter would be the measurement of earth leakage current in a circuit where the RCD keeps tripping out. The measured result will quickly identify whether the earth leakage current present is excessive causing the RCD to trip, or that the RCD itself is faulty. Standing earth leakage can be the result of various undetected faults in the installation such as cable insulation deterioration, cable damage or the entry of moisture into areas where there are exposed terminals or fittings.

The instrument is pocket sized, light weight, rugged and easy to use, making it an ideal choice for the electrical industry.

### FEATURES

- 0,01 mA resolution for measuring earth leakage currents
- 300 A range for standard current measurements
- Analogue Bargraph Display for trending
- Handguard designed for operator safety
- Pocket sized and lightweight

**SPECIFICATIONS**

**Measuring Method:** Dual integration mode

**Measuring Function:** Leakage current and load current

**Display:** 3,5 digit L.C.D.; max. reading of 3200

**Range:** 0-30 mA/300 mA/30 A/300 A (50/60Hz)

**Ranging:** 2 manual ranges

**Accuracy specified at operating temperature:** 23°C ± 5°C, 80% RH max.

| Range     | Min. Resolution | Accuracy                    |
|-----------|-----------------|-----------------------------|
| 30/300 mA | 0,01/0,1 mA     | ±1,2% rdg ±5 dgt            |
|           |                 | 0-200 A: ±1,2% rdg ±5 dgt   |
| 30/300 A  | 0,01/0,1 A      | 200-250 A: ±3,0% rdg ±5 dgt |
|           |                 | 250-300 A: ±5,0% rdg ±5 dgt |

**Jaw Opening Capability:** 40 mm

**Over Range Indication:** "OL" mark on L.C.D.

**Maximum Indication:** 3200

**Low Battery Indication:** 2,5 V - 2,7 V; "+-" mark on L.C.D.

**Data Hold Indication:** "DH" mark on L.C.D.

**Sampling Time:** Approx. 2 times/sec. (digital display)  
Approx. 12 times/sec. (bargraph display)

**Auto Power Off:** The meter is set to power off mode approx. 10 minutes after the power switch on

**Limitation of Circuit Voltage:** Less than a.c. 600 V

**Withstanding Voltage:** a.c. 3700 V/1 minute max. (between the core of CT and the unit housing)

**Operating Temperature:** 0 – 40 °C <80% RH (non-condensing)

**Storage Temperature:** -10 – 60 °C <70% RH (non-condensing)

**Power Supply:** 2 x 1,5 V button cells LR44 or SR 44

**Power Consumption:** Approx. 5 mW

**Battery Life:** Approx. 50 hrs. (LR44)

**Size:** 64 (W) x 176 (H) x 23 (D) mm  
2,5 (W) x 7 (H) x ,9 (D) inches approx.

**Weight:** Approx. 125 g (1/4 lb. approx.)

**Safety**

EN61010-1 and EN61010-2-032 300 V phase to earth and 500 V phase to phase CAT III or 600 V CAT II double insulated

**EMC**

In accordance with IEC61326 including amendment No.1.

**ORDERING INFORMATION**

| Item                     | Order Code |
|--------------------------|------------|
| Earth Leakage Clampmeter | DCM300E    |
| 2 Batteries (2 x LR44)   |            |
| Carrying Case            |            |
| Instruction Manual       | 6172-172   |

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