

CM300 Mk2 & CM400 MK2

Multifunction Insulation Testers



- Combines the functions of several instruments in one package
- RCD ramp test features actual tripping current
- Upgraded storage for approximately 750 different test results in internal memory
- Stores up to 99 circuit and distribution board references
- Recall results to the display for manual certificate completion or download to PowerSuite or NiceOne software
- Direct printer output for on-site printing of test results

DESCRIPTION

The Megger® CM300 Mk2 & CM400 Mk2 Multifunction Installation Testers are compact products that combine all the functions required to fully test Domestic, Commercial and Industrial fixed wiring, in accordance with International Standards.

Their memory and storage capability offers all data to display or download to a PC and a unique on-site print facility.

FEATURES

- Storage of test results, circuits and distribution panels
- Recall of test results to instrument display
- Display backlight
- Direct serial printer output via RS232 port
- Connect to IBM compatible PC for storage of results
- Ramp Test for measuring RCD actual trip currents
- Designed and manufactured in accordance with International Safety Standards
- Insulation tests at 250 V, 500 V & 1000 V with 1 mA output - range extended to 499.9 MΩ
- Continuity tests with 200 mA short circuit capability
- Phase-Phase, Phase-Neutral, Phase-Earth Loop Tests
- High current Loop Testing with 0,01 Ω resolution
- Prospective Earth Fault and Short Circuit Current
- Earth Electrode Resistance Test for simple systems

- No-trip, Trip and Fast Trip RCD testing
- Tests d.c. Sensitive, Selective and General Type RCDs
- Supply voltage, polarity and frequency indication
- Phase sequence indication using optional leads
- Complete with User Guide, Test Leads, Protective Pouch and Certificate of Test

DESCRIPTION

Tests in accordance with International Standards and National Wiring Regulations including BS7671 (16th edition wiring regulations) and Euro Standard EN61557.

Test lead resistances can be nulled and a continuity buzzer is incorporated for rapid identification of open and short circuits. Settable automatic polarity reversal and result averaging.

Loop tests are performed to a resolution of 0,01 Ω with direct display of PEFC and PSCC.

Auto-ranging earth resistance function enables measurement of earth electrode resistance on TT systems.

Verification of the correct operation of RCDs rated between 10 mA and 1000 mA with trip timing up to 2000 ms. A ramp test indicates actual trip current to aid in fault diagnosis.

Upon connection to the mains supply the polarity and voltage are displayed to show correct wiring of the socket under test and warn of live voltages. Supply frequency is indicated at the touch of a button.

Approximately 750 different results may be saved into internal memory for use later on.

Stored results may be recalled to the CM300 Mk2 & CM400 Mk2 display to enable reviewing and facilitate the manual recording and completion of test reports and certificates.

Test results may be printed directly on site by simply connecting an appropriate serial printer to the RS232 port.

A standard RS232 serial port enables test results to be downloaded to a PC for later use. The ultimate solution is provided with the use of PowerSuite™ for Windows™.

Meets or exceeds the requirements of EN61010-1 Category III 300V phase-earth 480 V (max) phase-phase

SPECIFICATION

Supply Voltage measurement

25 to 500 V $\pm 2\%$ ± 2 digits

Supply Frequency Measurement

d.c., 16,0 to 460 Hz $\pm 0,1\%$ ± 1 digit

Insulation Test Ranges

250, 500 & 1kV d.c. into 1 mA load

1 k Ω to 99,9 M Ω @ 250 V

1 k Ω to 299 M Ω @ 500 V

1 k Ω to 499 M Ω @ 1k V

$\pm 2\%$ ± 2 digits (up to 99 M Ω)

Continuity & Resistance Ranges

0,01 Ω to 99,9 Ω $\pm 2\%$ ± 2 digits

Open circuit voltage

4-5 V d.c.

Test current

200-250 mA up to 2 Ω

Loop & Earth Resistance Ranges

Line / Earth & Earth Electrode

Supply

100 to 280 V 45 to 65 Hz

0,01 Ω to 9,99 Ω $\pm 5\%$ $\pm 0,03$ Ω

10,0 Ω to 89,9 Ω $\pm 5\%$ $\pm 0,5$ Ω

90 Ω to 899 Ω $\pm 5\%$ ± 5 Ω

900 Ω to 3,00 k Ω $\pm 5\%$ ± 20 Ω

Line / Line (Phase / Phase)

Supply

100 to 480 V 45 to 65 Hz

0,01 Ω to 19,99 Ω $\pm 5\%$ $\pm 0,03$ Ω

PEFC

Calculated from nominal supply voltage divided by loop resistance.

RCD Test Ranges

Supply

100 to 280 V 45 to 65 Hz

I Δ n – 10, 30, 100, 300, 500, 1000 mA

Current accuracy

$\pm 2\%$ / $\pm 8\%$

No Trip (1 1/2 I Δ n), Trip (I Δ n),

150 mA Fast Trip, 5I Δ n and Ramp

General, d.c. and Selective RCDs

Trip timing 0,1 to 1999 ms $\pm 1\%$ ± 1 ms

Contact voltage 0,1 to 90,0 V $\pm 10\%$ -0% ± 5 digits

Auto Sequence 150 mA 40 ms test

Power Supply

8 x 1,5V Alkaline cells type LR6 or 1,5V nickel cadmium rechargeable cells.

A new set of alkaline battery cells will typically give more than 4500 insulation or 3250 continuity tests.

Fuses

Replaceable 500 mA (F) HBC 10 kA 500 V.

Non-replaceable 7 A (SIBA 70-065-63)

Safety

Double insulated to IEC61010-1(1995), EN61010-1(1995)

Installation Category III, 230V phase-ground, 440V phase-phase.

E.M.C.

In accordance with IEC61326 including Amendment No.1

Dimensions

245 mm x 200 mm x 95mm

Weight

1.35 kg

ORDERING INFORMATION

Item	Order Code
Supplied with Schuko Mains Lead (continent)	CM300 Mk2
Supplied with UK Mains Lead (UK)	CM400 Mk2
Included Accessories	
Instruction Book	
Mains lead	
2 wire test lead	
Test/Carry Case	
Carrying Strap	
Crocodile clips (red & black)	
Optional Accessories	
3 wire test lead set for phase rotation indication	6231-632
2 wire test lead set	6231-631
2 wire lead set with test switch in probe	6231-636
2 wire lead set with 5 metre length	6231-637
Test lead with Schuko plug	6231-635
Test lead with UK mains plug	6231-633
Earth bond test lead set	6231-634
Printer connection lead	25955-026
Computer connection lead	25955-025
Fused prod and clip set	6180-405

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 Le Raincy FRANCE, Cherrybrook
 AUSTRALIA, Guadalajara SPAIN
 and The Kingdom of BAHRAIN.

ISO STATEMENT

Registered to ISO 9001:2000 Cert. no. Q 09250
 Registered to ISO 14001:1996 Cert. no. EMS 61597
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