

Multifunctional 18th Edition electrical installation tester MI 3125BT COMBO



MI 3125BT is the ideal instrument for engineers who perform high volume testing or work regularly on TT and TN systems. Containing all necessary tests for installation safety testing, MI 3125 BT offers the brand new ability to test B-type (DC sensitive) RCDs. COMBO contains integrated characteristics of fuses and RCDs (including EV type) for the evaluation of line/loop impedance results. The bright graphic display with backlight ensures that results, indications, measurement parameters and messages are clear, visible and easy to read. The red and green LEDs on either side of the display provide a clear PASS/FAIL evaluation of test results. Each test has its own individual help screen describing how to connect the instrument into the installation and how to perform a measurement. All the results can be quickly saved and referenced on the instrument and then downloaded via the MESM software.

MEASURING FUNCTIONS:

- Insulation resistance with DC voltage.
- Continuity of PE conductors with 200 mA test current with polarity change.
- Continuity of PE conductors with 7 mA test current (continuous measurement).
- Line impedance.
- Loop impedance.
- Loop impedance with Trip Lock RCD function.
- TRMS voltage and frequency.
- Phase sequence.
- RCD testing (general and selective, type AC, A,B and EV for Electric Vehicles).
- Earth resistance (3-wire method).

KEY FEATURES:

- **LED Pass/Fail indicators:** two LED indicators for PASS/FAIL evaluation of test results are placed on both sides of the LCD.
- **Help screens:** instrument comes complete with built-in help screens for referencing on site.
- B type RCD testing is supported.
- **EV RCD** support for verification of 30 mA a.c. and 6 mA d.c. trip-out capabilities.
- **Earth resistance measurement:** instrument performs 3-wire earth resistance testing

with two additional rods.

- **Built-in loop impedance tables:** this unique feature allows automatic evaluation of the line/loop
- impedance results compared to the regulations.
- Online voltage monitoring: monitors all 3 voltages in real time.
- **Polarity swap:** automatic polarity reversal on continuity test.
- **Insulation range:** wide range of insulation test voltages from 50 V to 1000 V, reading up to 1000 M Ω .
- **Trip Lock function:** Zs (RCD) function performs a loop impedance test without tripping the RCD.
- **Built-in charger & rechargeable batteries:** unit has a built-in charging circuit and comes complete with a set of rechargeable NiMH batteries.
- **RCD auto:** automated RCD testing procedure significantly reduces test time.
- **Metrel ES Manager** for downloading test results and parameters and creation of test reports included. 18th Edition Certificates available (option).
- **Bluetooth communication** with PC, android tablets and smart phones via built-in BT.
- **Metrel aMESM Android app** a data management tool. PRO licence included.

APPLICATION:

- Initial and periodic testing of domestic and industrial installations.
- Testing of single and multiphase systems.
- Testing of TT and TN systems.

STANDARDS:

Functionality

- IEC/EN 61557

Other reference standards for testing

- VDE 0413;
- IEC/EN 61008;
- IEC/EN 61009;
- IEC/EN/HD 60364;
- HD 384; BS 7671;
- IEC/TR 60755;
- CEI 64.8;
- AS/NZ 3760;
- AS/NZ 3018

Electromagnetic compatibility

- IEC/EN 61326-1;
- IEC/EN 61326-2-2

Safety

- IEC/EN 61010-1;
- IEC/EN 61010-031

TECHNICAL SPECIFICATION

| Function | Measuring range | Resolution | Accuracy |
|---------------------------------------|--|--------------------------------|--|
| Insulation resistance (EN 61557-2) | U = 50, 100, 250 VDC: R: 0.00 MΩ ... 19.99 MΩ 20.0 MΩ ... 99.9 MΩ 100.0 MΩ ... 999.9 MΩ | 0.01 MΩ 0.1 MΩ 0.1 MΩ | ±(5 % of reading + 3 digits) ±10 % of reading ±20 % of reading |
| | U = 500 VDC, 1 kVDC: R: 0.00 MΩ ... 19.99 MΩ 20.0 MΩ ... 99.9 MΩ 200 MΩ ... 999 MΩ | 0.01 MΩ 0.1 MΩ 1 MΩ | ±(5 % of reading + 3 digits) ±5 % of reading ±10 % of reading |
| | 0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200 Ω ... 1999 Ω | 0.01 Ω 0.1 Ω 1 Ω | ±(3 % of reading + 3 digits) ±5 % of reading ±5 % of reading |
| | 0.0 Ω ... 19.9 Ω 20 Ω ... 1999 Ω | 0.1 Ω 1 Ω | ±(5 % of reading + 3 digits) ±(5 % of reading + 3 digits) |
| | 0.00 Ω ... 9.99 Ω 10.0 Ω ... 99.9 Ω 100 Ω ... 999 Ω 1.00 kΩ ... 9.99 kΩ | 0.01 Ω 0.1 Ω 1 Ω 10 Ω | ±(5 % of reading + 5 digits) ±(5 % of reading + 5 digits) ±10 % of reading ±10 % of reading |
| Line impedance (EN 61557-3) | 0.00 Ω ... 9.99 Ω 10.0 Ω ... 99.9 Ω 100 Ω ... 999 Ω 1.00 kΩ ... 9.99 kΩ | 0.01 Ω 0.1 Ω 1 Ω 10 Ω | ±(5 % of reading + 5 digits) ±(5 % of reading + 5 digits) ±10 % of reading ±10 % of reading |
| | 0.0 Ω ... 550 V | 1 V | ±(2 % of reading + 2 digits) |
| | 0.00 Hz ... 9.99 Hz 10.0 Hz ... 499.9 Hz | 0.01 Hz 0.1 Hz | ±(0.2 % of reading + 1 digits) |
| Phase sequence (EN 61557-7) | 1.2.3 or 3.2.1 | | |
| RCD testing (EN 61557-6) | IΔN: 10 mA, 30 mA, 100 mA, 300 mA, 500 mA, 1 A | | |
| - Contact voltage UC | 0.0 V ... 19.9 V 20.0 V ... 99.9 V | 0.1 V 0.1 V | (-0 %/+15 %) of r. ±10 digits (-0 %/+15 %) of reading |
| - Trip-out time | 0 ms ... 40.0 ms 0 ms ... max. time | 0.1 ms 0.1 ms | ±1 ms ±3 ms |
| - Trip-out current | 0.2 x IΔN ... 1.1 x IΔN (AC type) | 0.05 x IΔN | ±0.1 x IΔN |
| | 0.2 x IΔN ... 2.2 x IΔN (A type, IΔN < 30 mA) | 0.05 x IΔN | ±0.1 x IΔN |
| | 0.2 x IΔN ... 1.5 x IΔN (A type, IΔN ≥ 30 mA) | 0.05 x IΔN | ±0.1 x IΔN |
| | 0.2 x IΔN ... 2.2 x IΔN (B type) | 0.05 x IΔN | ±0.1 x IΔN |
| Earth resistance (EN 61557-5) | 0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200 Ω ... 9999 Ω | 0.01 Ω 0.1 Ω 1 Ω | ±(5 % of reading + 5 digits) ±(5 % of reading + 5 digits) ±(5 % of reading + 5 digits) |

GENERAL DATA

| | |
|----------------------|---|
| Power supply | 6 x 1.5 V alkaline or 6 x 1.2 V rechargeable batteries, type AA |
| Overvoltage category | 600 V/CAT III; 300 V/CAT IV |
| Protection class | double insulation |
| COM port | RS232 and USB |
| Dimensions | 140 x 80 x 230 mm |
| Weight | 1.0 kg |

Metrel UK Ltd.

Unit 16, 1st Qtr Business Park
Blenheim Road
Epsom Surrey
KT19 9QN

Phone: +44/1924 245 000 Fax: +44/1924 245 007

E mail: info@metrel.co.uk Web: http://www.metrel.co.uk

Note! Photographs in this catalogue may slightly differ from the instruments at the time of delivery.
Subject to technical change without notice.

ORDERING INFORMATION



MI 3125BT COMBO:

- Instrument MI 3125BT COMBO
- Soft hand strap
- Small soft carrying bag
- Test lead, 3 x 1.5 m
- Mains Plug Lead
- Tip Commander, 1.5m
- Test probe, 3 pcs (blue, brown, green)
- Crocodile clip, 3 pcs (blue, brown, green)
- Power supply adapter + 6 rechargeable batteries NiMH, type AA
- USB cable
- Metrel ES Manager BASIC license*
- Metrel aMESM PRO Android app
- Short instruction manual
- Calibration certificate

*Metrel ES Manager can be downloaded free of charge from www.metrel.co.uk

OPTIONAL ACCESSORIES

| Order no. | Description |
|-----------|---|
| 83005106 | 1 x 1.2 V NiMH battery |
| 83005401 | UK mains cable for charging adapter |
| 83005447 | 12 V battery charging adapter |
| P 1101 | Upgrade MESM to MESM PRO including 18 th Edition Forms |
| A 1003 | Three pin mains plug |
| A 1011 | Test lead, 3 x 1.5 m |
| A 1012 | Test lead, green, 4 m |
| A 1013 | Crocodile clip, black |
| A 1014 | |
| A 1015 | Test probe, black, blue, green |
| A 1062 | |
| A 1110 | Three phase adapter |
| A 1111 | Three phase adapter with switch |
| A 1153 | Test lead - black, 20 m |
| A 1154 | Test lead, black, 4 m |
| A 1160 | Charger for 8 AA batteries with 8 batteries, type AA |
| A 1164 | Test lead, black, 50 m |
| A 1169 | Fast charger for AA, C, D and 9 V block batteries |
| A 1198 | Magnetic contact probe |
| A 1201 | Insulated rod for CONTINUITY measurement |
| A 1202 | Additional extension part for A 1201 |
| A 1214 | Easi-switch |
| A 1271 | Small soft carrying bag |
| A 1289 | Soft carrying bag |
| A 1291 | PC SW EuroLinkPRO with USB & RS232-PS/2 cable |
| A 1296 | Test lead 3 x 1,5 m (brown, green, blue) |
| A 1298 | Test probe, brown |
| A 1302 | Set of carrying straps |
| A 1297 | |
| A 1309 | Crocodile clip, brown, green, blue |
| A 1310 | |
| A 1401 | Tip Commander |
| A 1431 | EuroLink Android |
| CS 2099 | Eurocheck |
| MET01 | Electrical installation certificate booklet |
| MET02 | Schedule of Inspection and circuit details/test results |
| MET03 | Minor Electrical Installation Works Certificate |
| MET04 | Periodic Inspection Reports |
| MET05 | Part P Domestic Electrical Installation Certificate |
| MPA1 | Breakout box |
| S 2026 | |
| S 2027 | Earth test set 3 wire, 20 m / 50 m |