

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

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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