

# MI 3125 EurotestCOMBO LITE



■ Compliant to BS 7671  
17<sup>th</sup> Edition and Part P

■ Easy to use



MI 3125 EurotestCOMBO LITE is the appropriate instrument for the installation safety testing on TT and TN systems. The large 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. EurotestCOMBO LITE contains integrated characteristics of fuses and RCDs for the automatic evaluation of the results. The handling of the instrument is designed to be as simple and clear as possible. Each test has its own individual help screen describing how to connect the instrument into the installation and how to perform a measurement. MI 3125 EurotestCOMBO LITE performs continuity, insulation, RCD, loop, line, voltage, frequency and phase sequence tests required by the EN 61557 standard.

## MEASURING FUNCTIONS:

- Insulation resistance with DC voltage.
- Continuity of PE conductors with 200 mA test current with polarity change.
- 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).

## 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.
- **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.
- **Upgradeable:** if changes occur to the regulations, upgrades can be made to the firmware to keep the unit up to date.
- **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 MΩ.
- **Trip Lock function:** Zs (RCD) function performs a loop impedance test without tripping the RCD.
- **Multi-system testing:** tests on single and multiphase TT and TN systems.
- **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.

## APPLICATIONS

- 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: BS 7671; EN 61008; EN 61009; EN 60364-4-41; AS/NZ 3760
- Electromagnetic compatibility (EMC): EN 61326
- Safety (LVD): EN 61010-1; EN 61010-031

# Technical specifications

Function	Measuring range	Resolution	Accuracy
Insulation resistance (EN 61557-2)	U = 50, 100, 250 V <sub>DC</sub> : R: 0.00 MΩ ... 19.99 MΩ	0.01 MΩ	±(5 % of reading + 3 digits)
	20.0 MΩ ... 99.9 MΩ	0.1 MΩ	±10 % of reading
	100.0 MΩ ... 199.9 MΩ	0.1 MΩ	±20 % of reading
	U = 500 V <sub>DC</sub> , 1 kV <sub>DC</sub> : R: 0.00 MΩ ... 19.99 MΩ	0.01 MΩ	±(5 % of reading + 3 digits)
	20.0 MΩ ... 99.9 MΩ	0.1 MΩ	±5 % of reading
	200 MΩ ... 999 MΩ	1 MΩ	±10 % of reading
Continuity 200 mA of PE conductor with polarity change (EN 61557-4)	0.00 Ω ... 19.99 Ω	0.01 Ω	±(3 % of reading + 3 digits)
	20.0 Ω ... 199.9 Ω	0.1 Ω	±5 % of reading
	200 Ω ... 1999 Ω	1 Ω	±5 % of reading
Loop impedance (EN 61557-3)	0.00 Ω ... 9.99 Ω	0.01 Ω	±(5 % of reading + 5 digits)
	10.0 Ω ... 99.9 Ω	0.1 Ω	±(5 % of reading + 5 digits)
	100 Ω ... 999 Ω	1 Ω	±10 % of reading
	1.00 kΩ ... 9.99 kΩ	10 Ω	±10 % of reading
Line impedance (EN 61557-3)	0.00 Ω ... 9.99 Ω	0.01 Ω	±(5 % of reading + 5 digits)
	10.0 Ω ... 99.9 Ω	0.1 Ω	±(5 % of reading + 5 digits)
	100 Ω ... 999 Ω	1 Ω	±10 % of reading
	1.00 kΩ ... 9.99 kΩ	10 Ω	±10 % of reading
Voltage	0 V ... 550 V	1 V	±(2 % of reading + 2 digits)
Frequency	0.00 Hz ... 9.99 Hz	0.01 Hz	±(0.2 % of reading + 1 digits)
	10.0 Hz ... 499.9 Hz	0.1 Hz	
Phase sequence (EN 61557-7)	1.2.3 or 3.2.1		
RCD testing (EN 61557-6)	I <sub>ΔN</sub> : 10 mA, 30 mA, 100 mA, 300 mA, 500 mA, 1 A		
- Contact voltage U <sub>c</sub>	0.0 V ... 19.9 V	0.1 V	(-0% / +15%) of reading ±10 d.
	20.0 V ... 99.9 V	0.1 V	(-0% / +15%) of reading
- Trip-out time	0 ms ... 40.0 ms	0.1 ms	±1 ms
	0 ms ... max. time	0.1 ms	±3 ms
- Trip-out current	0.2 x I <sub>ΔN</sub> ... 1.1 x I <sub>ΔN</sub> (AC type)	0.05 x I <sub>ΔN</sub>	±0.1 x I <sub>ΔN</sub>
	0.2 x I <sub>ΔN</sub> ... 2.2 x I <sub>ΔN</sub> (A type, I <sub>ΔN</sub> < 30 mA)	0.05 x I <sub>ΔN</sub>	±0.1 x I <sub>ΔN</sub>
	0.2 x I <sub>ΔN</sub> ... 1.5 x I <sub>ΔN</sub> (A type, I <sub>ΔN</sub> ≥ 30 mA)	0.05 x I <sub>ΔN</sub>	±0.1 x I <sub>ΔN</sub>
<b>General</b>			
Power supply	6 x 1.5 V alkaline or 6 x 1.2 V rechargeable batteries, size AA		
Overtoltage 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		



Large LCD with backlight and LED indicators for PASS / FAIL evaluation of test results.



User friendly keyboard enables simple and fast adjustment.

## Ordering information

Standard set

MI 3125



- Instrument EurotestCOMBO LITE MI 3125
- Hand strap
- Small soft carrying bag
- Test lead, 3 x 1.5 m
- Mains plug cable 1.5 m
- Test probe, 3 pcs (blue, brown, green)
- Crocodile clip, 3 pcs (blue, brown, green)
- Power supply adapter + 6 rechargeable batteries NiMH, type AA
- Mains cable for power supply adapter
- Short instruction manual
- Instruction manual and handbook on CD
- Calibration certificate

## Optional accessories

Photo	Order No.	Description
	A 1160	Fast charger with a set of 6 pcs NiMH batteries AA
	A 1198	Magnetic contact probe
	A 1153	Test lead black, 20 m
	A 1154	Test lead black, 4 m
	A 1175	Tip commander
	A 1194	Tip commander, 3-wire
	A 1302	Set of carrying straps
	A 1289	Soft carrying bag
	HC 30	Small hard case

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



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