

## MI 3125B EurotestCOMBO



- Handheld multifunctional installation tester
- Supports B-type RCDs testing



MI 3125B EurotestCOMBO 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 3125B offers the brand new ability to test B-type (DC sensitive) RCDs. EurotestCOMBO contains integrated characteristics of fuses and RCDs (including B 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 EuroLink PRO software, included in the standard set, to the computer for evaluation and report generation after testing.

### 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 and B).
- 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.
- **Earth resistance measurement:** instru-

ment 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 MΩ.
- **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.
- **PC SW EuroLink PRO** included in the the standard set enables downloading of test results and parameters and creation of test reports.

### 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> :<br>R: 0.00 MΩ ... 19.99 MΩ<br>20.0 MΩ ... 99.9 MΩ<br>100.0 MΩ ... 199.9 MΩ         | 0.01 MΩ<br>0.1 MΩ<br>0.1 MΩ | ±(5 % of reading + 3 digits)<br>±10 % of reading<br>±20 % of reading |
|                                    | U = 500 V <sub>DC</sub> , 1 kV <sub>DC</sub> :<br>R: 0.00 MΩ ... 19.99 MΩ<br>20.0 MΩ ... 99.9 MΩ<br>200 MΩ ... 999 MΩ | 0.01 MΩ<br>0.1 MΩ<br>1 MΩ   | ±(5 % of reading + 3 digits)<br>±5 % of reading<br>±10 % of reading  |
| Continuity, 200 mA<br>(EN 61557-4) | 0.00 Ω ... 19.99 Ω<br>20.0 Ω ... 199.9 Ω<br>200 Ω ... 1999 Ω                                                          | 0.01 Ω<br>0.1 Ω<br>1 Ω      | ±(3 % of reading + 3 digits)<br>±5 % of reading<br>±5 % of reading   |
|                                    | Continuity, 7 mA                                                                                                      | 0.1 Ω<br>1 Ω                | ±(5 % of reading + 3 digits)<br>±(5 % of reading + 3 digits)         |
| 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 digits                                 |
|                                    | 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>                                               |
|                                    | 0.2 x I <sub>ΔN</sub> ... 2.2 x I <sub>ΔN</sub> (B type)                                                              | 0.05 x I <sub>ΔN</sub>      | ±0.1 x I <sub>ΔN</sub>                                               |
| Earth resistance (EN 61557-5)      | 0.00 Ω ... 19.99 Ω                                                                                                    | 0.01 Ω                      | ±(5 % of reading + 5 digits)                                         |
|                                    | 20.0 Ω ... 199.9 Ω                                                                                                    | 0.1 Ω                       | ±(5 % of reading + 5 digits)                                         |
|                                    | 200 Ω ... 9999 Ω                                                                                                      | 1 Ω                         | ±(5 % of reading + 5 digits)                                         |
| <b>General</b>                     |                                                                                                                       |                             |                                                                      |
| 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                                                                                                                |                             |                                                                      |

## Main features



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



User friendly keyboard enables simple and fast adjustment.



Communication over USB and RS232 interfaces.



Neck and waist straps enables hands free operation.



Magnetic holder allows to fix the instrument onto metal surface for hands free operation.

## Ordering information

Standard set

MI 3125B



- Instrument MI 3125B EurotestCOMBO
- Set of carrying straps
- Test lead, 3 x 1.5 m
- Shuko-plug test cable
- Test probe, 3 pcs (blue, black, green)
- Crocodile clip, 3 pcs (blue, black, green)
- Power supply adapter + 6 rechargeable batteries NiMH, type AA
- USB cable
- RS232 - PS/2 cable
- PC SW EuroLink PRO
- Short instruction manual
- Instruction manual and handbook on CD
- Calibration certificate

## Optional accessories

| Photo | Order No. | Description                                        |
|-------|-----------|----------------------------------------------------|
|       | A 1110    | Three phase adapter                                |
|       | A 1111    | Three phase adapter with switch                    |
|       | 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 1170    | Plug commander                                     |
|       | A 1176    | Tip commander                                      |
|       | A 1303    | Soft hand strap                                    |
|       | A 1289    | Soft carrying bag                                  |
|       | A 1271    | Small soft carrying bag                            |
|       | A 1292    | Upgrade code EuroLink PRO to EuroLink PRO Plus     |
|       | S 2026    | Earth 20 m set, 3 wire                             |
|       | S 2027    | Earth 50 m set, 3 wire                             |

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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