

# EurotestLITE MI 3002

EurotestLITE  
where excellence  
and price-  
preformance meet



EurotestLITE is a complete multifunction installation safety tester with integrated memory module. Lightweight instrument is ergonomically designed and offers the customer one of the best price-performance ratio on the market. Windows compatible PC Software Eurolink enables downloading of the test data and creation of test reports.

#### Features:

- Fast and accurate Loop-Impedance measurement without RCD (FI) tripping
- On-Line voltage monitor shows actual L-L, L-N and L-PE voltages
- EurotestLITE supports testing in TT, TN and IT earthing systems
- Optional multi-function test tip supports START of the measurement and saves (SAVE) the test data
- Integrated memory module allows storage up to 500 measurements
- Windows compatible PC Software EuroLink serves for downloading , data management and test report creation purposes and comes delivered in a standard set
- A set of rechargeable batteries is included in a standard set

**Functional conformity:** VDE 0413, EN/IEC 60364, EN 61557, BS 7671, CEI 64.8, HD 384CE

**Safety and EMC conformity:** EN 61010-1, EN 61326

#### PE Continuity



#### Insulation resistance



#### RCD(FI) testing



#### Fault Line and Loop impedance



#### Voltage monitor



## Technical specifications

### Insulation resistance (EN 61557-2)

Measuring range ( $M\Omega$ ):

$0.000 \div 199.9$ ; Accuracy  $\pm(5\% \text{ of reading} + 3 \text{ Digits})$ ,  
 $U_N=100 V_{\text{--}}$ ,  $250 V_{\text{--}}$   
 $0.000 \div 199.9$ ; Accuracy  $\pm(2\% \text{ of reading} + 3 \text{ Digits})$ ,  
 $U_N= 500 V_{\text{--}}$ ,  $1000 V_{\text{--}}$   
 $200 \div 999$ ; Accuracy  $\pm(10\% \text{ of reading})$ ,  
 $U_N= 500 V_{\text{--}}$ ,  $1000 V_{\text{--}}$

Nominal voltage:

100 V, 250 V, 500 V, 1 kV (==)

Test current:  
Short circuit current:

min. 1 mA b at  $R_N=U_N \times 1 \text{ k}\Omega/V$   
 $< 3 \text{ mA}_{\text{--}}$

### Continuity measurement (EN 61557-4)

Measuring range ( $\Omega$ ):

$0.00 \div 19.99$ ; Accuracy  $\pm(3\% \text{ of reading} + 3 \text{ Digits})$   
 $20.0 \div 99.9$ ,  $100 \div 1999$ ; Accuracy  $\pm(5\% \text{ of reading})$   
min.  $\pm 200 \text{ mA}_{\text{--}}$  at  $2 \Omega$   
 $6.5 V_{\text{--}} \div 9.0 V_{\text{--}}$

### Low $\Omega$ (7mA) measurement

Open circuit voltage ( $\Omega$ ):

$0.0 \div 99.9$ ,  $100 \div 1999$ ; Accuracy  $\pm(5\% \text{ of reading} + 3 \text{ Digits})$   
Max.  $8.5 \text{ mA}_{\text{--}}$

Test current:

$6.5 V_{\text{--}} \div 9.0 V_{\text{--}}$

### Line impedance ZL (L-L, L-N) (EN 61557-3)

Measuring range ( $\Omega$ ):

$0.00 \div 19.99$ ,  $20 \div 99.9$ ,  $100 \div 1999$ ;  
Accuracy  $\pm(5\% \text{ of reading} + 3 \text{ Digits})$

$I_{sc}$ :

$0.00 A \div 24.4 kA$

Nominal line voltage:

$100 V \div 440 V$ ,  $/45 \text{ Hz} \div 65 \text{ Hz}$

### Loop impedance ZLOOP (L-PE) (EN 61557-3)

Measuring range ( $\Omega$ ):

$0.00 \div 19.99$ ,  $20 \div 99.9$ ,  $100 \div 1999$ ;

$I_{sc}$ :

Accuracy  $\pm(5\% \text{ of reading} + 5 \text{ Digits})$

Nominal line voltage:

$0.00 A \div 24.4 kA$

Open circuit voltage:

$100 V \div 264 V$ ,  $/45 \text{ Hz} \div 65 \text{ Hz}$

### Voltage, frequency

Measuring range (V):

$0 \div 500 V$ ; Accuracy  $\pm(2\% \text{ of reading} + 2 \text{ Digits})$   
On-Line Voltage-monitor for all measuring functions  
 $45 \text{ Hz} \div 65 \text{ Hz}$ ; accuracy  $\pm 2 \text{ Digit}$

### Measuring range (Hz):

### Phase sequence (EN 61557-7)

Displayed result:

1.2.3 or 2.1.3

Nominal line voltage:

$100 V \div 440 V$ ,  $/45 \text{ Hz} \div 65 \text{ Hz}$

### RCD (FI) testing (EN 61557-6)

Measuring range ( $I_{AN}$ ):

$10 \text{ mA}, 30 \text{ mA}, 100 \text{ mA}, 300 \text{ mA}, 500 \text{ mA}, 1000 \text{ mA}$

Nominal line voltage:

$100 V \div 264 V$ ,  $/45 \text{ Hz} \div 65 \text{ Hz}$

Contact voltage ( $U_C$ ):

$0.0 \div 9.9$ , accuracy  $(-0\% \div +10\% \text{ of reading} + 2 \text{ Digits})$

Measuring range (V):

$10 \div 99.9$ , accuracy  $(-0\% \div +10\% \text{ of reading})$

Calculated

Fault Loop Impedance  $R_S$ :

$R_S=U_C / I_{AN}$

### Trip-out time for standard RCD(FI) devices (no time delay)

$I_{AN} \times 1$ ;  $I_{AN} \times 0.5$ ;  $0 \text{ ms} \div 300 \text{ ms}$  (500 ms)  
 $I_{AN} \times 2$ ;  $0 \text{ ms} \div 150 \text{ ms}$  (200 ms)  
 $I_{AN} \times 5$ ;  $0 \text{ ms} \div 40 \text{ ms}$  (150 ms),  
 $U_C: 0.0 V \div 100.0 V$

### Trip-out current

Measuring range  $I_{AN}$ :

bei  $I_{AN} = 10 \text{ mA}$

$0.2 \times I_{AN} \div 1.1 I_{AN}$  (AC Typ), accuracy  $\pm 0.1 \times I_{AN}$

bei  $I_{AN} = 30 \text{ mA}$

$0.2 \times I_{AN} \div 2.2 I_{AN}$  (A Typ), accuracy  $\pm 0.1 \times I_{AN}$

$0.2 \times I_{AN} \div 1.1 I_{AN}$  (AC Typ), accuracy  $\pm 0.1 \times I_{AN}$

$0.2 \times I_{AN} \div 1.5 I_{AN}$  (A Typ), accuracy  $\pm 0.1 \times I_{AN}$

## General data

Supply voltage:

$9 V_{DC}$  ( $6 \times 1.5 V$  ( $6 \times 1.5 V$ , Battery alkaline or rechargeable size AA))

Charger:

$12 V \div 15 V$

Over-voltage category:

CAT III /  $600 V$ ; CAT IV /  $300 V$

Protection class:

double insulation

Pollution degree:

2

Degree of protection:

IP 42

Display:

128 x 64 dots matrix display with backlite

Dimensions:

( $230 \times 103 \times 115$ ) mm

Weight (incl. batteries):

1.32 kg

Operating temperature:

$0^{\circ}C \div 40^{\circ}C$

## Ordering information

Standard set

Part No.: MI 3002



- Soft carrying neck belt
- Soft carrying bag
- Schuko-plug test cable
- Universal test cable, 3 x 1.5 m
- Power supply adapter with 6 pcs NiMH, AA batteries
- Test tip: blue, black, green
- Alligator clip, 3 pcs
- RS232/PS2 cable
- USB cable
- Instruction manual-short
- Instruction manual on CD
- Product verification data

## Optional Accessories

Photo	Order No.	Description
	A 1110	Three phase cable
	A 1111	Three phase adapter
	A 1153	Test lead, black 20 m
	A 1154	Test lead, black 4 m
	A 1164	Test lead, black 50 m
	A 1160	Fast 6 cells AA charger with a set of 6 pcs NiMH batteries
	A 1169	Fast 12 cells charger, AA size
	A 1170	Schuko plug commander
	A 1245	Commander - holder



Measuring and Regulation Equipment Manufacturer

METREL d.d.

Ljubljanska 77

SI-1354 Horjul

Tel: + 386 (01) 75 58 200

Fax: + 386 (01) 75 49 226

E-mail: metrel@metrel.si

http://www.metrel.si

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