

Multifunctional installation testers

MI 3100 s EurotestEASI



MI 3100 s EurotestEASI is a fast, accurate and easy to use multifunctional measuring instrument which performs a basic set of installation safety tests according to IEC/EN 61557. Besides, the MI 3100 s EurotestEASI enables on-line voltage monitoring, phase sequence testing and earth resistance measurement. EurotestEASI is equipped with integrated characteristics of fuses and RCDs for PASS / FAIL evaluation of test results.

MEASURING FUNCTIONS

- Insulation resistance with DC voltage from 50 V to 1000 V;
- Continuity of PE conductors with 200 mA test current with polarity change;
- Continuity of PE conductors with 7 mA test current without RCD tripping;
- 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, F);
- Earth resistance (3-wire method).

KEY FEATURES

- **Built-in help screens** for referencing on site.
- **Built-in fuse tables** for automatic evaluation of the line / loop impedance result.
- **On-line voltage monitoring:** monitors all 3 voltages in real-time.
- **Polarity swap:** automatic polarity reversal on continuity test.
- **Trip Lock function:** loop impedance test without tripping the RCD.
- **Built-in charger** unit has a built-in charging circuit and comes complete with a set of rechargeable NiMH batteries.
- **RCD auto:** automated RCD testing procedure.

APPLICATION

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

STANDARDS

Functionality

- IEC/EN 61557

Other reference standards for testing

- IEC/EN 60364-4-41;
- EN 61008;
- EN 61009;
- BS 7671;
- AS/NZ 3017

Electromagnetic compatibility

- EN 61326

Safety

- EN 61010-1;
- EN 61010-031;
- EN 31010-2-030;
- EN 31010-2-032

TECHNICAL SPECIFICATION

FUNCTION		Measuring range	Resolution	Accuracy	
CONTINUITY	Test Current 7 mA 2-wire	0.00 Ω ... 19.99 Ω 20.0 Ω ... 1999 Ω	0.1 Ω 1 Ω	±(5 % of r. + 5 digits)	
	Test Current 200 mA 2-wire	0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200.0 Ω ... 1999 Ω	0.01 Ω 0.1 Ω 1 Ω	±(3 % of r. + 3 digits) ±(5 % of r.) ±(5 % of r.)	
	INSULATION RESISTANCE	Test Voltage 50/100/250 V	0.00 MΩ ... 19.99 MΩ 20.0 MΩ ... 99.9 MΩ 100.0 MΩ ... 199.9 MΩ	0.01 MΩ 0.1 MΩ 1 MΩ	±(5 % of r. + 3 digits) ±(10 % of r.) ±(10 % of r.)
	Test Voltage 500/1000 V	0.00 MΩ ... 19.99 MΩ 20.0 MΩ ... 199.9 MΩ 200 MΩ ... 999 MΩ	0.01 MΩ 0.1 MΩ 1 MΩ	±(5 % of r. + 3 digits) ±(5 % of r.) ±(10 % of r.)	
RCD	Contact voltage	0.00 V ... 19.99 V 20.0 V ... 99.9 V	0.1 V	(-0%/±15 %) of r. ± 10 digits (-0%/±15 %) of r.	
	Trip out time	0.0 ms ... 40.0 ms 0.0 ms ... max.time	0.1 ms	±1 ms ±3 ms	
	Trip out current	0.2xI _{ΔN} ... 1.1xI _{ΔN} (AC) 0.2xI _{ΔN} ... 1.5xI _{ΔN} (A, I _{ΔN} ≥30 mA) 0.2xI _{ΔN} ... 2.2xI _{ΔN} (A, I _{ΔN} <30 mA)	0.05xI _{ΔN}	±0.1xI _{ΔN}	
IMPEDANCE	Zline L-L, L-N Ipfc	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 r. + 5 digits) ±(10 % of r.)	
	Zloop L-PE, Ipfc	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 r. + 5 digits) ±(10 % of r.)	
	VOLTAGE	TRMS	0 ... 550 V	1 V	±(2 % of r. + 2 digits)
		Frequency	0.00 Hz ... 9.99 Hz 10.0 Hz ... 499.9 Hz	0.01 Hz 0.1 Hz	±(0.2 % of r. + 1 digits)
	EARTH RESISTANCE	3 wire	0.00 Ω ... 19.99 Ω 20.0 Ω ... 199.9 Ω 200.0 Ω ... 9999 Ω	0.01 Ω 0.1 Ω 1 Ω	±(5 % of r. + 5 digits)
		GENERAL	Power supply	9 VDC (6x1.5 V battery or accu, size AA)	
Overvoltage category			CAT II / 1000 V _{DC} ; CAT III / 600 V; CAT IV / 300 V		
Protection class	Double insulation				
Weight	1.3 kg				
Size (l x h x w)	230 x 103 x 115 mm				

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ORDERING INFORMATION



Standard set (MI 3100 s)

- Instrument EurotestEASI
- Schuko-plug test cable, 1.5 m
- Test lead, 3 x 1.5 m
- Test probe, 3 pcs (blue, black, green)
- Crocodile clip, 3 pcs (blue, black, green)
- Power supply adapter + 6 NiMH rechargeable batteries, size AA
- Soft carrying neck belt
- Soft carrying bag
- Short instruction manual
- Instruction manual on CD
- Handbook on CD
- Calibration certificate

OPTIONAL ACCESSORIES

Photo	Order No.	Acc. description
	A 1201	Insulated rod for CONTINUITY measurement
	A 1202	Additional extension part for A 1201
	A 1164	Test lead, black, 50 m
	A 1153	Test lead, black, 20 m
	A 1154	Test lead, black, 4 m
	S 2026	Earth test set, 3-wire, 20 m
	S 2027	Earth test set, 3-wire, 50 m
	A 1110	Three phase adapter
	A 1111	Three phase adapter with switch