

MI 3100 s EASI



Basic electrical installation safety tester



MI 3100 s EASI 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 and is compliant to BS 7671 17th Edition. Besides, the MI 3100 s EASI enables on-line voltage monitoring, phase sequence testing and earth resistance measurement. EASI is equipped with integrated characteristics of fuses and RCDs for PASS / FAIL evaluation of test results and is ready for automatic R1 + R2 testing.

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 / Loop impedance;
- R1 + R2 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.
- Monitoring of all 3 voltages in real-time.
- Automatic polarity reversal on continuity test.
- Loop impedance test without tripping the RCD.
- Built-in charger and rechargeable batteries as standard accessory.
- Automated RCD testing procedure.
- Fast testing of ring circuits with optional A 1214 EASI Switch.

APPLICATION

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

STANDARDS

- Functionality:
EN 61557
- Other reference standards for testing:
IEC/EN 60364-4-41;
EN 61008;
EN 61009;
BS 7671;
AS/NZ 3017;
- Electromagnetic compatibility (EMC):
EN 61326
- Safety (LVD):
EN 61010-1;
EN 61010-031
EN 31010-2-030
EN 31010-2-032

Technical specification

Function		Measuring range	Resolution	Accuracy
CONTINUITY, RING 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 ... 99.9 Ω 100.0 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	±(5 % of r. + 3 digits) ±(10 % of r.) ±(20 % 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	RCD U _c	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.
	RCD (t)	0.00 ms ... 40.0 ms 0.0 V ... max.time	0.1 ms	±1 ms ±3 ms
	RCD I Ramp	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}	±0.1I _{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) ±(5 % of r.) ±(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) ±(5 % of r.) ±(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 MΩ ... 19.99 Ω 20.0 MΩ ... 199.9 Ω 200.0 MΩ ... 999.9 Ω	0.01 Ω 0.1 Ω 1 Ω	±(5 % of r. + 5 digits)
GENERAL	Power supply	9 VDC (6 x 1.5 V battery or accu, size AA)		
	Overvoltage category	1000 V DC CAT II; 600 V CAT III; 300 V CAT IV		
	Protection class	double insulation		
	Weight	1.3 kg		
	Size (l x h x w)	230 x 103 x 115 mm		

Ordering information

Standard set

MI 3100 s



- Instrument MI3100 s EASI
- Mains plug
- Test lead, 3 x 1.5 m
- Test probe, 3 pcs (blue, brown, green)
- Crocodile clip, 3 pcs (blue, brown, 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.	Description
	A 1401	Tip commander (3-wire)
		Plug commander (UK)
	A 1214	EASI Switch
	A 1110	Three phase adapter
	A 1111	Three phase adapter with switch
	A 1201	Insulated rod for CONTINUITY measurement
	A 1202	Additional extension part for A 1201
	A 1457	Test lead, brown, 50 m
	A 1456	Test lead, brown, 20 m
	A 1455	Test lead, brown, 4 m
	A 1198	Magnetic contact probe
	A 1160	Fast charger for 8 AA batteries with a set of 6 NiMH batteries, type AA
	S 2026 - UK1	Earth test set, 3-wire, 20 m
	S 2027 - UK1	Earth test set, 3-wire, 50 m



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