

Multifunctional electrical installation tester MI 3152H EurotestXC 2,5 kV

NEW



MI 3152H EurotestXC 2,5 kV is an instrument from the new generation of Metrel's multifunctional measuring instruments. The already well known functions like complete installation safety testing according to IEC/EN 61557 and AUTO SEQUENCE testing of TN and TT earthing systems expanded with insulation resistance measurement with the test voltage up to 2,5 kV are managed by a completely new user interface based on large colour touch screen display. A wide range of functions is included: from on-line voltage monitoring, phase sequence testing, earth resistance measurement with 3 wire and 2 clamps method and illuminance measurement, TRMS current measurement up to RCD tests, line and loop impedance tests as well as diagnostic test enabled by PI and DAR indexes calculation.



MEASURING FUNCTIONS

- Insulation resistance with DC voltage from 50 V to 2500 V and PI, DAR calculation;
- Continuity of PE conductors with 200 mA DC test current with polarity change;
- Continuity of PE conductors with 7 mA test current without RCD tripping;
- Line/Loop impedance;
- Loop impedance with Trip Lock RCD function;
- TRMS voltage and frequency;
- Phase sequence;
- Power and harmonics;
- RCD testing (general and selective, type AC, A, F);
- Earth resistance (3-wire and 2-clamps method);
- Specific earth resistance with Ro-adapter (option);
- TRMS leakage and load currents (option);
- Illumination (option);
- High resolution Loop impedance (mΩ) (option).

KEY FEATURES

- Predefined mini AUTOSEQUENCES:
Auto TT (U, ZIn, Zs, Uc);
Auto TN/RCD (U, ZIn, Zs, Rpe);

Auto TN (U, ZIn, ZIpe, Rpe).

- 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.
- Automated RCD testing procedure.
- Built-in charger and rechargeable batteries as standard accessory.
- BT communication with PC, Android tablets and smart phones via built-in BT.
- PC SW Metrel ES Manager for creation of test structures and uploading, downloading of test results and report creation.

APPLICATION

- Initial and periodic testing of domestic and industrial installations.
- Testing of Insulation resistance of transformers, motors, cables, machines, etc.
- Observation of insulation trends.
- Testing of single and multiphase systems.
- Testing of TT and TN supply systems.

STANDARDS

Functionality

- EN 61557
- DIN 5032

Other reference standards for testing:

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

Electromagnetic compatibility (EMC):

- IEC/EN 61326-1

Safety

- IEC/EN 61010-1
- IEC/EN 61010-031
- IEC/EN 61010-2-030
- IEC/EN 61010-2-032

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. + 3 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	±(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.)
	Test Voltage 2500 V	0.00 MΩ ... 19.99 MΩ 20.0 MΩ ... 199.9 MΩ 200 MΩ ... 999 MΩ 1.00 GΩ ... 19.99 GΩ	0.01 MΩ 0.1 MΩ 1 MΩ 0.01 GΩ	±(5 % of r. + 3 digits) ±(5 % of r.) ±(10 % of r.) ±(10 % of r.)
INSULATION ANALYSING	Calculation of PI, DAR, DD Only for test voltage 500/1000/2500 V	0.01 MΩ ... 9.99 MΩ 10.0 MΩ ... 100 MΩ	0.01 MΩ 0.1 MΩ	±(5 % of r. + 2 digits) ±(5 % of r.)
RCD	RCD Uc	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), 0.0 V ... max.time	0.00 ms ... 40.0 ms 0.0 V ... max.time	0.1 ms	±1 ms ±3 ms
	RCD I Ramp	0.2xIΔN ... 1.1xIΔN (AC) 0.2xIΔN ... 1.5xIΔN (A), IΔN ≥30 mA) 0.2xIΔN ... 2.2xIΔN (A), IΔN <30 mA)	0.05xIΔN	±0.1xIΔN
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)
CURRENT	TRMS, AC with A 1018	0.0 mA ... 99.9 mA 100 mA ... 999 mA 1.00 A ... 19.99 A	0.1 mA 1 mA 0.01 A	±(5 % of r. + 5 digits) ±(3 % of r. + 3 digits) ±(3 % of r.)
	TRMS, AC with A 1019	0.0 mA ... 99.9 mA 100 mA ... 999 mA 1.00 A ... 19.99 A	0.1 mA 1 mA 0.01 A	indicative ±(5 % of r.) ±(3 % of r.)
	TRMS, AC/DC with A 1391, range=40 A	0.00 A ... 1.99 A 2.00 A ... 19.99 A 20.0 A ... 39.9 A	0.01 A 0.01 A 0.1 A	±(3 % of r. + 3 digits) ±(3 % of r.) ±(3 % of r.)
	TRMS, AC/DC with A 1391, range = 300 A	0.00 A ... 19.99 A 20.0 A ... 39.9 A 40.0 A ... 299.9 A	0.01 A 0.1 A 0.1 A	indicative indicative ±(3 % of r. + 5 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
	2 clamp	0.00 Ω ... 19.99 Ω 20.0 Ω ... 30.0 Ω 30.1 Ω ... 39.9 Ω	0.01 Ω 0.1 Ω 0.1 Ω	±(10 % of r. + 10 digits) ±(20 % of r.) ±(30 % of r.)
	Specific earth resistance	0.0 Ωm ... 99.9 Ωm 100 Ωm ... 999 Ωm 1.00 kΩm ... 9.99 kΩm 10.0 kΩm ... 99.9 kΩm 100 kΩm ... 9999 kΩm	0.1 Ωm 1 Ωm 0.01 kΩm 0.1 kΩm 1 kΩm	±(5 % of r.) for Re 1 Ω ... 1999kΩ ±(10 % of r.) for Re 2 kΩ ... 19.99kΩ ±(20 % of r.) for Re > 20 kΩ
ILLUMINANCE	Type B	0.01 lux ... 19.99 lux 20.0 lux ... 199.9 lux 200 lux ... 1999 lux 2.00 klux ... 19.99 klux	0.01 lux 0.1 lux 1 lux 10 lux	±(5 % of r. + 2 digits) ±(5 % of r.)
	Type C	0.01 lux ... 19.99 lux 20.0 lux ... 199.9 lux 200 lux ... 1999 lux 2.00 klux ... 19.99 klux	0.01 lux 0.1 lux 1 lux 10 lux	±(10 % of r. + 3 digits) ±(10 % of r.)
GENERAL	Power supply	9 VDC (6x1.5 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		
	COM port	BT, USB, RS232		
	Weight Size (l x h x w)	1.3 kg 230 x 103 x 115 mm		

ORDERING INFORMATION



Standard set MI 3152H

- Instrument MI 3152H EurotestXC
- Plug commander, 1.5 m
- 2.5 kV test lead, 2 x 1.5 m
- Test lead, 3 x 1.5 m
- Power supply adapter + 6 NiMH rechargeable batteries, type AA
- Test probe, 4 pcs (blue, black, green, red)
- Crocodile clip, 4 pcs (blue, black, green, red)
- Earth set 20 m
- RS232 - PS/2 cable
- USB cable
- Soft carrying bag
- Soft carrying neck belt
- PC Software Metrel ES Manager with BASIC licence key
- Short instruction manual

OPTIONAL ACCESSORIES

Photo	Order No.	Acc. description
	A 1143	Euro Z 290 A
	A 1018	Current clamp (low range, leakage)
	A 1019	Current clamp
	A 1110	Three phase adapter
	A 1111	Three phase adapter with switch
	A 1314	Plug commander
	A 1401	Tip commander
	A 1172	Luxmeter sensor, type B (PS/2)
	A 1173	Luxmeter sensor, type C (PS/2)
	A 1105	Barcode scanner
	A 1160	Fast charger for 8 AA batteries with a set of 6 NiMH bat., type AA
	S 2027	Earth test set, 3-wire, 50 m
	P 1001	Licence key for advanced Metrel ES Manager

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