

NEW

MI 3394 CE MultiTesterXA



**Hi-Pot (flash),
Earth (ground bond),
Insulation resistance and
other specific tests**



The MI 3394 CE MultiTesterXA is a portable instrument intended for electrical safety testing and CE certification of electrical appliances, machines and switchboards during the production. The instrument features in strong data management facility enabling the user to create custom auto-tests with predefined limits for pass/fail evaluation, to import predefined structure including test sequences or complete projects from PC software, plus strong memory organizer. The PC software MES-Manager enables the upload of automated test sequences, projects, downloading of test results to the PC, automatic data storage into a file, printing of test reports. Due to selected test functions, durable construction and accompanying PC SW package CE MultiTesterXA is the perfect instrument for electrical safety testing in the most demanding environments like laboratories, automated production lines or specialized workshops.

KEY FEATURES:

- **Data management:** the instrument features in unique user friendly data management facility and state of the art memory organizer.
- **Multiple test terminals:** different test terminals enabling the user to chose from performing single tests or autosequences from single test socket.
- **Auto testing:** autosequences can be composed via instruments intuitive sequence organizer.
- **MicroSD:** support for microSD memory card (8-GB supplied with the instrument) up to 32GB.
- **Colour display:** 3.4" colour LCD display with touch screen.
- **Hi-pot:** high voltage AC (5kV at 500VA) and DC (6kV) test.
- **Continuity:** 4 – wire continuity test with selectable test current (0.2 A, 4 A, 10A, 25A) enabling precise measurements.
- **Communication:** 4 – RS232, USB, Ethernet and Bluetooth communication ports enabling downloading, uploading and remote control over instrument.
- **Multi-system testing:** the instrument can be used on TT, TN, IT and 115 V supply systems.

MEASURING FUNCTIONS:

- High Voltage, programmed (AC/DC).
- High Voltage burn-out test.
- Continuity tests.
- Insulation resistance measurement.
- Substitute leakage current.
- Differential leakage current.
- Touch leakage current.
- PE-leakage current.
- Discharge time.
- Functional test (power P/S/Q, voltage, current, $\cos\phi$, frequency, ThdU, ThdI, PF).

APPLICATIONS:

- Laboratories,
- Automated production lines,
- Specialized workshops.

STANDARDS:

Functionality

- IEC 60335 Household and similar electrical appliances
- 61439 Low-voltage switchgear and controlgear assemblies
- IEC 60598 Luminaires
- IEC 60950 Safety of information technology equipment
- IEC 61010 Safety requirements for electrical equipment
- VDE 0701-702 Inspection after repair, modification of electrical appliances – Periodic inspection on electrical appliances General requirements for electrical safety
- EN 50191 Erection and operation of electrical test equipment

Safety (LVD):

EN 61010-1; EN 61010-2-030;
EN 61010-031; EN 61557

EMC:

EN 61326-1

Technical data:

Function	Measuring range	Resolution	Accuracy
HVAC, Programmable HVAC (100 V ... 5000 V); 10 V step			
Test voltage (AC)	0 ÷ 1999 V 2.00 ÷ 5.99 kV	1 V 10 V	± (3 % of reading) ± (3 % of reading)
Test current			
apparent	0.0 ÷ 99.9 mA	0.1 mA	± (3 % of reading + 3 D)
capacitive	0.0 mA ÷ 99.9 mA	0.1 mA	Indicative
resistive	-99.9 mA ÷ 99.9 mA	0.1 mA	Indicative
HVDC, Programmable HVDC (100 V ... 6000 V); 50 V step			
Test voltage (DC)	0 ÷ 1999 V 2.00 ÷ 6.99 kV	1 V 10 V	± (3 % of reading) ± (3 % of reading)
Test current	0.01 ÷ 9.99 mA	0.01 mA	± (5 % of reading + 3 D)
Discharging time			
t	0.0 ÷ 9.9 s	0.1 s	± (5 % of reading + 3 D)
Up	0 ÷ 550 V	1 V	± (5 % of reading + 3 D)
Continuity (0.2A, 4A, 10A, 25A)			
R	0.00 Ω ÷ 19.99 Ω	0.01 Ω	± (2 % of reading + 2 D)
	20.0 Ω ÷ 99.9 Ω	0.1 Ω	± 3 % of reading
	100.0 Ω ÷ 199.9 Ω	0.1 Ω	± 5 % of reading
	200 Ω ÷ 999 Ω	1 Ω	Indicative
Insulation resistance (250 V, 500 V, 1000 V), Insulation resistance – S (250 V, 500 V, 1000 V)			
Riso/Riso-s	0.00 M Ω ÷ 19.99 M Ω 20.0 M Ω ÷ 199.9 M Ω	0.01 M Ω 0.1 M Ω	± (3 % of reading + 2 D)
Output voltage	0 V ÷ 1200 V	1 V	± (3 % of reading + 2 D)
Insulation resistance (50 V, 100 V), Insulation resistance – S (50 V, 100 V)			
Riso/Riso-s	0.00 M Ω ÷ 19.99 M Ω 20.0 M Ω ÷ 199.9 M Ω	0.01 M Ω 0.1 M Ω	± (3 % of reading + 2 D) ± 5 % of reading
Output voltage	0 V ÷ 1200 V	1 V	± (3 % of reading + 2 D)
Substitute leakage (open circuit voltage <50 V a.c.)			
Isub / Isub s	0.00 mA ÷ 19.99 mA	10 µA	± (5 % of reading + 3 D)
Differential Leakage current			
Idiff	0.00 mA ÷ 19.99 mA	0.01 mA	± (3 % of reading + 5 D)
PE leakage current			
Ipe	0.00 mA ÷ 19.99 mA	0.01 mA	± (3 % of reading + 3 D)
Touch leakage current			
Itou	0.00 mA ÷ 19.99 mA	0.01 mA	± (3 % of reading + 3 D)
Power			
P	0 W ÷ 999 W	1 W	± (5 % of reading + 5 D)
	1.00 kW ÷ 3.70 kW	10 W	± 5 % of reading
S	0 VA ÷ 999 VA	1 VA	± (5 % of reading + 5 D)
	1.00 kVA ÷ 3.70 kVA	10 VA	± 5 % of reading
Q	±(0 ÷ 999) VAr	1 VAr	± (5 % of reading + 5 D)
	±(1.00 ÷ 3.70) kVAr	10 VAr	± (5 % of reading + 5 D)
PF	0.00i ÷ 1.00i	0.01	± (5 % of reading + 5 D)
	0.00c ÷ 1.00c	0.01	± (5 % of reading + 5 D)
THDU	0.0% ÷ 99.9%	0.1%	±(5 % of reading + 5 D)
THDI	0.0% ÷ 99.9%	0.1%	±(5 % of reading + 5 D)
Cos Phi	0.00i ÷ 1.00i	0.01	±(5 % of reading + 5 D)
	0.00c ÷ 1.00c	0.01	±(5 % of reading + 5 D)
U	0.1 V ÷ 199.9 V	0.1	±(3 % of reading + 10 D)
	200 V ÷ 264 V	1 V	±(3 % of reading)
I	0.00 A ÷ 16.00 A	0.01	±(3 % of reading + 5 D)
Power supply	110 V / 230 V AC, 50 Hz / 60 Hz		
Overtoltage category	CAT II / 300 V, CAT II / 600 V (DISCH1 / DISCH2, only)		
Protection class	I		
HV output	5 kV a.c. / 6 kV d.c., double insulation		
COM port	4 x RS232, 1 x USB, 1 x Ethernet, 1 x Bluetooth		
Dimensions (w×h×d):	43,5 cm x 29,2 cm x 15,5 cm		
Weight:	17 kg		

Ordering information

Standard set

MI 3394



- Instrument CE MultiTesterXA
- HV test pistol with 2 m cable, 2 pcs
- Continuity test lead, 2.5 m, 2 pcs
- Continuity test lead, red, 1.5 m, 1pcs
- Insulation test lead, red, 2.5 m
- Insulation test lead, black, 2.5 m
- Crocodile clip, black, 3 pcs
- Crocodile clip, red, 2 pcs
- Discharge time cable
- Mains cable
- Bag for accessories
- Calibration certificate
- RS232 cable
- USB cable
- CD with instruction manual (full version)
- PC SW Metrel ES Manager

Optional accessories

Photo	Order No.	Description
	A 1014	Test tip, black
	A 1016	Test tip, red
	A 1017	EXT/DOOR IN cable
	A 1060	Two way mains adapter
	A 1105	Barcode scanner
	S 1058	CONTINUITY test lead, 10 m, 2 pcs
	S 1072	CONTINUITY test lead with 2 pole alligator clip, 2.5 m, set of 2 pcs
	A 1458	SanDisk MicroSD card reader
	A 1079	Discharge time cable



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