Recommended accessories for support industrial applications

Photo	Part No.:	Description	Target application	Functions:	
	A 1143	Euro Z 290 A	Euro Z 290 A is an impedance tester, which enables line / loop impedance measurements with accuracy down to 0.1 mΩ.	AUTOSEQUENCE ®	Auto TT (U, Zln, Zs, Uc) Auto TN/RCD (U, Zln, Zs, Rpe) Auto TN (U, Zln, Zlpe, Rpe) Auto IT (U, Zln, Isc, Isfl, IMD)
	A 1199	Ro-adapter	Ro-adapter is intended for performing earth resistance measurements in combination with installation safety tester.	Voltage TRMS	TRMS Frequency 3-Phase system (Phase SEQUENCE)
				Three Phase	Differential leakage current
	CS 2099	Eurocheck	Eurocheck is a professional multifunctional field calibrator intended for use with installation safety testers.	Earth Bond / Continuity	Test Current 7 mA 2-wire Test Current 200 mA 2-wire RPE 200 mA 3-wire Ring Test 200 mA (UK installations)
	A 1172	Luxmeter sensor, type B (PS/2)	Luxmeter sensor, type B, for high-accuracy illuminance measurements; e.g. for emergency lightning inspection.	Insulation Resistance	Ring Auto 200 mA (UK installations) Test Voltage 50 V Test Voltage 100 V Test Voltage 250 V Test Voltage 250 V
Part	A 1314 A 1401	Plug commander Tip commander	Single phase, 3-wire, commander with TEST and MEM function and a RGB LED indicator for easy insulation safety measurements.		Test Voltage 500 V Test Voltage 1000 V Test of IMD, ELM, RCM Automatic Discharge
"	A 1018	Current clamp (low range, leakage)	High accuracy current clamp 1000 A / 1 A with 52 mm jaw opening and fixed 1.5 m cable for both load and low range / leakage current measurements as well as for earth resistance measurements.	Leakage Current	Differential Leakage Leakage Current (with optional Clamp) ISFL: L1, L2 (First Fault Leakage) AC Insulation Leakage Zing Le Mage
8	A 1019	Current clamp	Current clamp 1000 A / 1 A with 52 mm jaw opening for general current measurements and in combination with A 1018 for earth resistance measurements without breaking the loop.	Z Line / Loop Impedance	Zline L-L, L-N Ipsc Zloop L-PE, Ipfc Zs (rcd) Zref, ΔU% Fuse Tables
	S 2027	Earth test set, 3-wire, 50 m	Earth test set for earth resistance measurements for distances up to 50 m. The set includes: test lead, 50 m, 2 pcs; test lead, 4.5 m; test lead, 1 m, 2 pcs; earth spike, 2 pcs; soft carrying bag.		Test Current 290 A 4-wire RCD type AC, A PRCD type AC, A RCD type F
	P 1001	Licence key for advanced MES Manager	Licence key for upgrading the MES Manager to advanced version with professional report creation functionality.	RCD	RCD type B, B+ RCD Uc RCD (t) RCD I Ramp
	A 1198	Magnetic contact probe	Test probe with magnetic contact provides reliable contact with metal surfaces during the measurements.		RCD Auto PRCD-S, PRCD-K RCD 3-Phase Earth Resistance 2-wire, 3-wire
	A 1201 A 1202	Insulated rod for continuity measurement	Insulated rod enables insulation resistance and continuity measurements on hard-to-reach objects, e.g. luminaries.	Earth / Ground Resistance	Specific Earth Resistance 4-wire 2-Clamps Earth Resistance Apparent power - (S)
	A 1111 A 1215	Three phase adapter with switch	3-phase adapter with selection switch for installation safety testing on 3-phase sockets type 16 A 3CEE. The adapter allows seamless switching between measurements.	Functional	Power P, Q, PF/Cos ϕ Harmonics AC Current DC Current TRMS Current Load test



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Note! Photographs in this catalogue may slightly differ from the instruments at the time of delivery. Subject to technical change without notice.

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www.metrel.si

Low Voltage Electrical Installations Safety from Power Transformer to Connected Loads 2016

Measuring instruments and testers

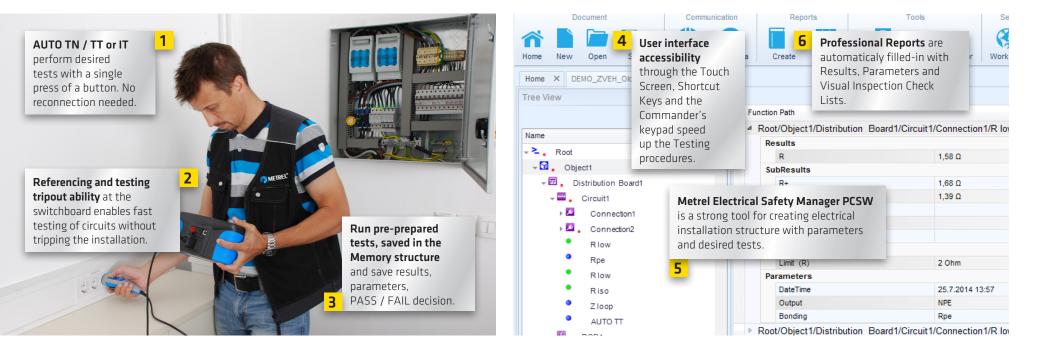


Heavy industrial electrical installations safety testing with maintenance and troubleshooting support Hi-precision EIS Tester MI 3152 Eurotest XC with a set of Adapters for Residential, Industrial, Plant and Commercial Electrical Power Systems

AUTOSEQUENCE[°] Patented Automatic Testing of TN/TT/IT Earthing Systems Managed by Innovative User Interface. Standards Applied IEC/EN 61557 Multifunctional All in One Portable Tester MI 3152 EurotestXC with a set of adapters offers a unique solution for: IEC/EN/HD 60364-4-41 • Delivering High Standards of Quality and Safety, IEC/EN 61008 • Automatic Procedures for Maintenance, Service or Development Testing, IEC/EN 61009 IEC/EN 61326-1 Sophisticated Support for TN/TT and IT Earthing Systems, IEC/EN 61010-1 • Supporting Three Phase and Single Phase Systems, IEC/EN 61010-031 Heavy Industrial Ruggedness in Electrical Installations Safety, IEC/EN 61010-2-030 Automatic Testing of ISFL on an unearthed System and IMD Alarms for any Mobile Generator, • Live Transformer's Impedance Measurement with Four Wire Test, IEC/EN 61010-2-032 • Hi-precision Short Circuit Current evaluation with Calculated Hot factor. MI 3152 METREL AS/NZ 3017 Special Installations Support for Medical Surgery Rooms. BS 7671 Main Menu (09:57 ·D E \mathbf{O} Recommended set: Single Tests ÷ờ- A 1143 Euro Z 290 A Impedance CS 2099 Eurocheck Field Calibrator ≣@ --- >> A 1201 and A 1202 Insulated Rod for Continuity **≡**ø A 1401 Tip Commander **General Settings** • A 1111 Three Phase Adapter A 1314 Plug Commander • A 1160 Fast Charger Set A1172 Luxmeter Sensor Type B A 1018 Current Clamp Leakage A 1019 Current Clamp Generator S 2027 Earth Test Set 50 m A 1199 Ro-adapter AP 1001 MESM Licence Code Ĩ ٢

AUTOSEQUENCE [®] trip-lock testing on single or three phase TN / TT / IT earthing systems

Switchboard and Circuit Inspection - Fast and simple browsing through menus and submenus enables the user to easily find, select and modify desired tests, testing sequences and parameters and incorporate them in the Memory structure. Obtained results from Single Tests or Autosequence Procedures can then be transferred to our Metrel ES Manager software for automatic report creation. Results from switchboard and/or circuit testing provide PASS/FAIL decisions on overall safety of the installation.



4. Multiple User Interface...

 $\bullet \bullet \bullet$

≣@

2. Referencing parameters at 3. PASS / FAIL decisions...

the switchboard...

Ζ (LN) 0.88Ω

Ζ (LPE)1.16Ω

AUTO TN (RCD)

257∨

0.2 % 🗸 Zref

lpsc (LN)

Ipsc (LPE)



overheated transformers.





7. Four- wire type of Connection.

6. Professional Reports..

Customer No.: Inspect. No.: Order No.: ELECTRICAL INSTALLATION TEST REPORT

Earthing system: TN-C ZTN-CS TN-S TT IT Mains: Ruble utility:

Metrel Electrical Safety

Manager PCSW..

🚬 👵 Node

🚽 🛐 👝 Building

🚽 🚾 👝 Dist. Board

🚽 🚍 👵 Circuit

Z line

RCD Auto





1. AUTOSEQUENCE for

Auto Tests

AUTO TT AUTO TN (RCD

TNRC

TT

IT

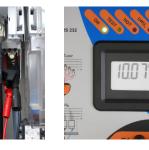
AUTO IT

TN / TT / IT...

HI-PRECISION impedance for automatic disconnection ability of industrial power installations

Power Electrical Installation's Tripout Ability Testing - Eurotest XC in connection with the Euro Z 290 A adapter is a professional portable high current 290 A, 4-wire Live Circuit and Power Transformers Impedance tester. HOT Factor is calculated within the result of Ipsc min. and Ipfc min. representing an added value and unique solution where predicted reserve factor is evaluated in case of error on

> **8.9.** Hi-precision FUSE trip-out ability.



10. Impedance measurement



with a Resolution of $1 \text{ m}\Omega$...

11. Special installations Testing Support.



12,13. Current Clamps for Leakage and Conductive Loops.



14. Ground Resistance and Resistivity

