# Recommended accessories for support industrial applications

hoto	Part No.:	Description	Target application	Functions:	
			Euro Z 290 A is an impedance tester, which enables line / loop impedance measurements with accuracy down to 0.1 m $\Omega$ .	AUTOSEQUENCE ®	Auto TT (U, ZIn, Zs, Uc)
	A 1143	Euro Z 290 A			Auto TN/RCD (U, ZIn, Zs, Rpe)
					Auto TN (U, ZIn, ZIpe, Rpe)
					Auto IT (U, ZIn, Isc, Isfl, IMD)
				Voltage TDMC	TRMS
	A 1199	Ro-adapter	Ro-adapter is intended for performing earth resistance measurements in combination with installation safety tester.	Voltage TRMS	Frequency
				Three Phase	3-Phase system (Phase SEQUENCE)
					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)
					Ring Auto 200 mA (UK installations)
	A 1172  A 1314 A 1401	Luxmeter sensor, type B (PS/2)  Plug commander Tip commander	Luxmeter sensor, type B, for high-accuracy illuminance measurements; e.g. for emergency lightning inspection.  Single phase, 3-wire, commander with TEST and MEM function and a RGB LED indicator for easy insulation safety measurements.	Insulation Resistance	Test Voltage 50 V
					Test Voltage 100 V
					Test Voltage 250 V
					Test Voltage 500 V
					Test Voltage 1000 V
					Test of IMD. ELM. RCM
					Automatic Discharge
					Differential Leakage
1	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	Leakage Current (with optional Clamp)
					ISFL: L1. L2 (First Fault Leakage)
					AC Insulation Leakage
					Zline L-L. L-N Ipsc
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	Zloop L-PE. Ipfc
					Zioop (-PE, ipic Zs (rcd)
					Zref, ΔU%
			Farth tast set for earth resistance measurements for		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.	RCD	Test Current 290 A 4-wire
					RCD type AC, A
					PRCD type AC, A
					RCD type F
	P 1001 A 1198	Licence key for advanced MES Manager Magnetic contact probe	Licence key for upgrading the MES Manager to advanced version with professional report creation functionality.  Test probe with magnetic contact provides reliable contact with metal surfaces during the measurements.		RCD type B, B+
					RCD Uc
					RCD (t)
					RCD I Ramp
					RCD Auto
					PRCD-S, PRCD-K
					RCD 3-Phase
					Earth Resistance 2-wire, 3-wire
		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
	A 1201				2-Clamps Earth Resistance
	A 1202				Apparent power - (S)
				Functional	Power P, Q, PF/Cos φ
	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.		Harmonics
					AC Current
					DC Current
					TRMS Current
					Load test

#### METREL d.d.

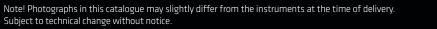
Measuring and Regulation Equipment Manufacturer
Ljubljanska 77, SI-1354 Horjul, Slovenia
T +386 (0)175 58 200, F +386 (0)175 49 226

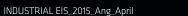


Low Voltage Electrical Installations Safety from Power Transformer to Connected Loads 2015

Measuring instruments and testers









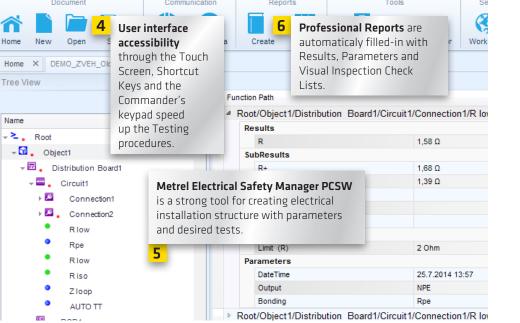
Heavy industrial electrical installations safety testing with maintenance and troubleshooting support Hi-precision EIS Tester MI 3152 Eurotest XC with a set of Adapters for Residential, Industrial, Plant and Commercial Electrical Power Systems



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

**Switchboard and Circuit Inspection -** Fast and simple browsing through the 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.





## **1.** AUTOSEQUENCE for **2.** TN / TT / IT



Page 2

**2.** Referencing parameters at the switchboard... **3.** PASS / FAIL decisions...



s... **4.** Multiple User Interface...



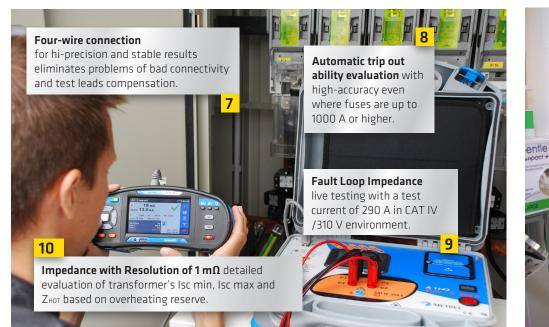
**5.** Metrel Electrical Safety Manager PCSW...

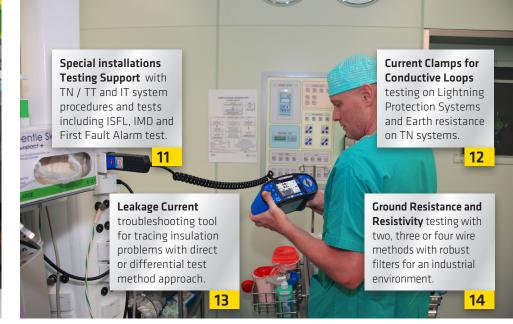


6. Professional Reports..

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 overheated transformers.





#### **7.** Four- wire type of Connection...

Page **3** 



**8,9.** Hi-precision FUSE trip-out ability



**10.** Impedance measurement with a Resolution of  $1 \text{ m}\Omega$ ...



**11.** Special installations **12,13.** Current Clamps for Testing Support Leakage and Conductive Leakage and Conduct



**14.** Ground Resistance and Resistivity...

