# A 1143 Euro - Z 290 A



The **Euro - Z 290 A** is a professional portable test instrument intended for **low impedance measurements** in environments up to **CAT IV /310 V**. It can operate alone or in combination with the METREL instruments. **High precision line impedance** and **high precision fault loop impedance** measurements in range from 1 m $\Omega$  up to 19.99  $\Omega$  are its excellence.

**Built-in LCD** offers easy reading of impedance result. The operation of the instrument A 1143 is clear and simple.

A1143 is automatically recognized by Metrel instrument. Supported instruments are:

- MI 3105 EurotestXA
- MI 3101 EurotestAT
- MI 2086 Eurotest 61557
- MI 3321 MultiservicerXA

Instrument is equipped with all accessories necessary for comfortable measurements. It is kept in a robust waterproof case together with all accessories.

- ✓ CAT IV/310 V
- **✓** Built-in LCD
- ✓ Ipsc/Ipfc up to 400 kA
- ✓ Test current up to 350 A



### **STANDARDS**

Electromagnetic compatibility (EMC)

- IEC/ EN 61326-1 Electrical equipment for measurement, control and laboratory use EMC requirements Part 1: General requirements Class A (Hand held equipment used in industrial EM environments)
- IEC/EN 61326-2-2 Electrical equipment for measurement, control and laboratory use EMC requirements
   Part 2-2: Particular requirements
   Test configurations, operational conditions and performance criteria for portable test, measuring and monitoring equipment used in low-voltage distribution systems

### Safety (LVD)

- IEC/ EN 61010 1 Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements
- IEC/ EN 61010 031 Safety requirements for hand-held probe assemblies for electrical measurement and test

### Functionality

 IEC/ EN 61557 Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. Equipment for testing, measuring or monitoring of protective measures



# **Technical specification**

## High precision line impedance / High precision fault loop impedance

Range (Ω)	Resolution (m $\Omega$ )	Accuracy
0.1m - 199.9m	0.1	1/E 0/ + 1 == 0)
200m - 1999m	1	±(5 % + 1 m Ω)
2.00 - 19.99	10	$\pm (5 \% + 10 \text{ m}\Omega)$

Nominal voltage range 100 V - 530 V

Nominal frequency 50 Hz Maximum test current (at 230V) 154 A (10 ms) Maximum test current (at 400V) 267 A (10 ms) Maximum test current (at 530V) 350 A (10 ms)

### Contact voltage

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Range (V)	Resolution (V)	Accuracy
0 - 100	1	±(10 % + 3 digits)

# **General data**

Power supply voltage: 6 VDC (4x1.5 V battery, size C (IEC LR14))

Operation time: > 15 h

Communication port: RS 232 custom LCD Display:

CAT IV/310 V Overvoltage category: Protection classification: double insulation

Pollution degree:

Operation conditions:

Working temperature range: 0 °C - 40 °C

95 %RH (0 °C - 40 °C), non-condensing Maximum relative humidity:

Dimensions (w x h x d): 345 mm x 160 mm x 335 mm

Weight (without accessories):

## **Ordering information:**

Part No. A 1143 Standard set



- Instrument Euro-Z 290 A
  Test lead, 2 wire (2 m, 2.5 mm2, 2 pcs)
  Test lead (black, 2 m, 1.5 mm2, 1 pcs)
  Test probe (red, 2 pcs)
  Crocodile clip (black, 3 pcs)
  Crocodile clip (red, 2 pcs)
  RS232 cable
  Instruction manual
  Calibration certificate



Measuring and Regulation Equipment Manufacturer

METREL d.d. Ljubljanska 77

SI-1354 Horjul Tel: + 386 (0)1 75 58 200 Fax: + 386 (0)1 75 49 226 E-mail: metrel@metrel.si http://www.metrel.si