

# 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 ( $\Omega$ )	Resolution (m $\Omega$ )	Accuracy
0.1m - 199.9m	0.1	
200m - 1999m	1	$\pm(5\% + 1\text{ m}\Omega)$
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

Range (V)	Resolution (V)	Accuracy
0 - 100	1	$\pm(10\% + 3\text{ digits})$

# General data

Power supply voltage: 6 VDC (4x1.5 V battery, size C (IEC LR14))  
 Operation time: > 15 h

Communication port: RS 232  
 Display: custom LCD

Overvoltage category: CAT IV/310 V  
 Protection classification: double insulation  
 Pollution degree: 2

Operation conditions:  
 Working temperature range: 0 °C - 40 °C  
 Maximum relative humidity: 95 %RH (0 °C - 40 °C), non-condensing

Dimensions (w x h x d): 345 mm x 160 mm x 335 mm  
 Weight (without accessories): 5 kg

## Ordering information:

Standard set

Part No. A 1143



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

## Optional accessories

Photo	Order No.	Description
	S 2055	Set of 2 flat contact clamps with fuse
	S 2056	Set of 2 flat contact clamps



Measuring and Regulation Equipment Manufacturer

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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.