

1. TECHNICAL SPECIFICATIONS

Accuracy indicated as: $\pm[\%rdg + (num. \text{ dgt} * \text{ resolution})]$ at $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$, $<70\%\text{RH}$

DC/AC VOLTAGE MEASUREMENT

Range [V]	Resolution [V]	Accuracy	Input impedance	Overload protection
$\pm 6, 12, 24, 50, 120, 230, 400, 690$	1	$\pm(1.0\%rdg+3dgt)$ (DC Voltage) $\pm(1.5\%rdg+5dgt)$ (AC Voltage)	1M Ω	690VDC/AC

Max output current: $<1\text{mA}$ (400VAC); $<1.5\text{mA}$ (690VDC)

Detection AC/DC voltage: automatic

Measuring range selection: automatic

Frequency range: 50/60Hz

Minimum detected voltage: 4.5V (AC), 3V(DC)

AC VOLTAGE MEASUREMENT WITH LOW IMPEDANCE (LoZ)

Range [V]	Resolution [V]	Measure time	Input impedance	Overload protection
$12 \div 230$	1	max 5s $< 250\text{V}$	$<6\text{k}\Omega$	3s $<400\text{VAC}, 690\text{VDC}$

Max output current: $I_s \leq 200\text{mA}$ @690V, max 30s (ca. 48mA @ 230V)

Detection AC voltage: automatic from 12V

Measuring range selection: automatic

Frequency range: 50/60Hz

Minimum detected voltage: 12VAC

AC VOLTAGE WITH 1 WIRE

Range [V]	Frequency range [Hz]	Measurement method	Overload protection
$100 \div 690$	$50 \div 60$	1-wire with contact on metal live parts	1000VAC

PHASE SEQUENCE INDICATION

Voltage range [V]	Frequency range [Hz]	Measurement method
$100 \div 690$ (Phase – Earth)	$50 \div 60$	2-wires with contact on metal live parts

CONTINUITY TEST

Range	Buzzer	Test current	Overload protection
$\rightarrow))$	$<200\text{k}\Omega$	$<1\mu\text{A}$	690VDC/400VAC

2. GENERAL SPECIFICATIONS

Mechanical specifications

Dimensions (L x W x H):	240 x 78 x 40mm
Weight (included batteries):	240g
Encapsulation:	IP64

Display

Type:	LCD 3½ dgts, max. 1999 points + sign and backlight
Conversion:	mean value
Sample rate:	2-3volte/s

Power supply

Internal supply:	2x1.5V alkaline batteries type AAA, IEC LR03
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Reference guidelines

Safety:	IEC/EN61010-1, IEC/EN61243-3:2014
EMC:	IEC/EN61326-1
Insulation:	double insulation
Pollution degree:	2
Measurement category:	CAT III 1000V; CAT IV 600V

Environmental conditions

Reference temperature:	23°C ± 5°C
Working temperature:	-10°C ÷ 55°C
Working humidity:	<85%RH
Storage temperature:	-10°C ÷ 70°C
Storage humidity:	<85%RH
Max height of use:	2000m

This product conforms to the prescriptions of the European directive on Low Voltage (LVD) 2014/35/EU and to EMC directive 2014/30/EU
This product conforms to the prescriptions of the European directive 2011/65/EU (RoHS) and the European directive 2012/19/EU (WEEE)