

Fault Loop Impedance Meter

index: WMGBMZC306



# Lightweight and professional fault loop meter

## Capabilities

- Fault loop impedance measurement with 0.01  $\Omega$  resolution.
- Low-current impedance measurement in circuits protected by RCD  $\ge$  30mA with 0.01  $\Omega$  resolution (range of 100...440 V).
- Operates in networks with voltages 110/190 V, 115/200 V, 127/220 V, 220/380 V, 230/400 V, 240/415 V, 290/500 V and 400/690 V (operating range 100...750 V).
- Operating frequency 45...65 Hz
- Calculation of I<sub>k</sub> fault current.
- Automatic differentiation between phase and phase-to-phase voltage.
- Possibility of applying an adapter terminated by a power network plug or 1.2, 5, 10, 20 m test leads.
- Measurement with swapped L and N conductors.
- Measurement of resistance (R<sub>s</sub>) and reactance (X<sub>s</sub>) components.

#### Additional features

- Contact electrode quick testing of proper connection of PE conductor.
- Voltage measurement 0...750 V AC (0...250 V with resolution of 0,1 V).
- Memory of 990 measurement results, ability to transfer the data to a PC via USB.
- Power supply: batteries (4 x LR14) or rechargeable batteries.

## Application

This instrument is irreplaceable for all kind of electrical works, especially in situations where there is a need to check the **circuits under voltage of 400/690 V**. The meter is used for tests in homes, apartment blocks, public buildings, small workshops or factories and even at **wind farms**.

The meter is a perfect tool for testing systems, where fault currents may reach **5.3 kA** (measured according to EN 61557).



# **Technical specifications**

rechnical specifications				
Measurement functions	Measurement range	Display range	Resolution	Accuracy ±(% m.v. + digits)
Voltage	0 V750 V	0 V750 V	from 0.1 V	from ±(2% m.v. + 2 digits)
Short-circuit loop parameters				
2p method - standard current measurement maximum current 36.7 A	from 0.13 Ω1999 Ω acc. to EN 61557	0.00 Ω1999 Ω	from 0.01 Ω	from ±(4% m.v. + 3 digits)
2p method - measurements without tripping RCDs	from 0.43 Ω1999 Ω acc. to EN 61557	0.00 Ω1999 Ω	from 0.01 Ω	from ±(6% m.v. + 5 digits)
Short-circuit current readings				
2p method - standard current measurement	Calculated on the basis of test Z <sub>s</sub> ranges and rated voltages	0.055 A69.0 kA	from 0.001 A	Calculated on the basis of error for fault loop
2p method - measurements without tripping RCDs	Calculated on the basis of test Z <sub>s</sub> ranges and rated voltages	0.055 A40.0 kA	from 0.001 A	Calculated on the basis of error for fault loop
Safety and work conditions				
Measuring category according to EN 61010		IV 600 V, III 1000 V		
Ingress protection		IP54		
Type of insulation according to EN 61010-1 and EN 61557		double		
Power supply		NiMH 4.8 V 2.4 Ah rechargeable battery 4x LR14 1.5 V alkaline battery		
Dimensions		288 x 223 x 75 mm		
Weight		ca. 2 kg		
Operating temperature		0+45°C		
Storage temperature		-20+60°C		
Humidity		2090%		
Nominal temperature		23 ± 2°C		
Reference humidity		40%60%		
Memory and communication				
Memory of measurement results		990 results		
Data transmission		USB		
Other information				
Quality standard – development, design and production		ISO 9001		
The product meets the EMC (emission for industrial environment) requirements according to standards		EN 61326-1 EN 61326-2-2		

## **Standard accessories**



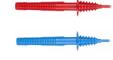
WS-05 adapter with UNI-SCHUKO angular plug WAADAWS05

Crocodile clip,

WAKROBU20K02

blue, 1 kV 20 A

M1 hanging straps



Pin probe 1 kV (banana socket) red / blue / yellow

WASONRFOGB1 WASONBUOGB1 WASONYEOGB1

Pin probe 5 kV (banana

WASONREOGB2 WASONBLOGB2

socket) red / black

L1 hanging straps

WAPOZSZE2



Test lead 1.2 m (banana plugs) red / blue / yellow

WAPRZ1X2REBB WAPRZ1X2BUBB WAPRZ1X2YEBB



Test lead 0.7 m (banana plugs) black WAPRZ0X7BLBB

L4 carrying case WAFUTL4

Z7 Power sup-

ply adapter

WAZASZ7



NiMH battery 4.8 V 4.2 Ah WAAKU07

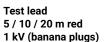
WAP07S7F4



Mains power cable Euro 2-pin plug / IEC C7 plug WAPRZLAD230

Calibration certificate issued by an accredited laboratory





WAPRZ005REBB WAPRZ010REBB WAPRZ020REBB

Industrial socket adapter 16A / 32A

WAADAAGT16T WAADAAGT32T

Three-phase socket adapter 63 A WAADAAGT63P

**Calibration certificate** with accreditation

USB cable WAPRZUSB **Optional accessories** 



Crocodile clip 1 kV 20 A red / yellow WAKRORE20K02 WAKROYE20K02

WS-01 adapter with

Three-phase socket

adapter 16A / 32A

Cable for battery charging from car

cigarette lighter

socket (12 V)

WAADAAGT16C WAADAAGT32C

START button with

**UNI-Schuko plug** 

WAADAWS01



Foldable pin probe, 1 kV, 2 m (banana socket) WASONSP2M

Pin probe 11 kV

WASONREOGB11

(banana socket) red

Three-phase socket

adapter 16A / 32A

WAADAAGT16P WAADAAGT32P







**Battery container** WAPOJ1

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