



Fault Loop Impedance Meter

MZC-20E

index: WMGBMZC20E

IP67

CAT III

300 V



Pocket measurements

Capabilities

- Fault loop impedance measurement with 0.01 Ω resolution.
- Operates in networks with voltages 220/380 V, 230/400 V, 240/415 V (operating range 180...440 V).
- Operating frequency 45...65 Hz
- Calculation of I_k fault current.
- Automatic differentiation between phase and phase-to-phase voltage.
- Possibility of applying test leads: 1.2 m, 5 m and longer.
- Measurement with swapped L and N conductors.
- Measurement of resistance (R_s) and reactance (X_s) components.

Additional features

- Voltage measurement 0...440 V AC.
- Power supply: batteries (4 x LR6) or rechargeable batteries (4 x NiMH).

Application

This meter is designed for measurements on objects protected by circuit breakers with rating up to 63 A, where fault currents reach 1 kA, i.e. in housing industry, single and multi-family houses, office buildings, small factories and all other facilities that are equipped with low-voltage electrical systems. In addition, the meter is a useful tool for maintenance services.



Technical specifications

Measurement functions	Measurement range	Display range	Resolution	Accuracy ±(% m.v. + digits)
Voltage	0 V...440 V	0 V...440 V	1 V	±(2% m.v. + 2 digits)
Short-circuit loop parameters				
2p method - standard current measurement maximum current 26.7 A	from 0.24 Ω...200 Ω acc. to EN 61557	0.00 Ω...200 Ω	from 0.01 Ω	from ±(2.5% m.v. + 3 digits)
Short-circuit current readings				
2p method - standard current measurement	Calculated on the basis of test Z_s ranges and rated voltages	1.15 A...40 kA	from 0.01 A	Calculated on the basis of error for fault loop
Bezpieczeństwo i warunki użytkowania				
Kategoria pomiarowa wg EN 61010			III 300 V	
Stopień ochrony			IP67	
Rodzaj izolacji wg EN 61010-1 i EN 61557			double	
Zasilanie		4x LR6 1.5 V alkaline battery 4x AA size NiMH rechargeable battery		
Wymiary			220 x 98 x 58 mm	
Masa miernika			509 g	
Temperatura pracy			-10...+50°C	
Temperatura przechowywania			-20...+70°C	
Wilgotność			20...80%	
Temperatura nominalna			23 ± 2°C	
Wilgotność odniesienia			40%...60%	
Pozostałe informacje				
Standard jakości – opracowanie, projekt i produkcja			ISO 9001	
Wyrób spełnia wymagania EMC (emisja dla środowiska przemysłowego) wg norm			EN 61326-1 EN 61326-2-2	



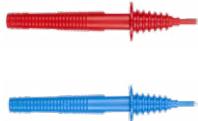
w.m. - wartość mierzona

Standard accessories



**Crocodile clip
1 kV 20 A red**

WAKRORE20K02



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

WASONREOGB1
WASONBUOGB1



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

WAPRZ1X2REBB
WAPRZ1X2UBBB



M1 hanging straps

WAPOZSZE4



**M1 hanging
hook straps**

WAPOZUCH1



M13 carrying case

WAFUTM13



4x LR6 1.5 V battery



Calibration certi-
ficate issued by an
accredited laboratory

Optional accessories



**Pin probe 1 kV
(banana socket)
yellow**

WASONYE0GB1



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

WASONSP2M



**Test lead
5 / 10 / 20 m red
1 kV (banana plugs)**

WAPRZ005REBB
WAPRZ010REBB
WAPRZ020REBB



**Three-phase socket
adapter 16A / 32A**

WAADAAGT16C
WAADAAGT32C



**Three-phase socket
adapter 16A / 32A**

WAADAAGT16P
WAADAAGT32P



**Three-phase socket
adapter 63 A**

WAADAAGT63P



**Industrial socket
adapter 16A / 32A**

WAADAAGT16T
WAADAAGT32T



Calibration certificate
with accreditation