



# Fault Loop Impedance Meter 康高特-SONEL MZC-20E

index: WMGBMZC20E



300 V

## Pocket measurements

### Capabilities

- Fault loop impedance measurement with 0.01  $\Omega$  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. + 3 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 <sub>s</sub> ranges and rated voltages	1.15 A...40 kA	from 0.01 A	Calculated on the basis of error for fault loop
Safety and work conditions				
Measuring category according to EN 61010			III 300 V	
Ingress protection			IP67	
Type of insulation according to EN 61010-1 and EN 61557			double	
Power supply			4x LR6 1.5 V alkaline battery 4x AA size NiMH rechargeable battery	
Dimensions			220 x 102 x 61 mm	
Weight			509 g	
Operating temperature			-10...+50°C	
Storage temperature			-20...+70°C	
Humidity			20...80%	
Nominal temperature			23 ± 2°C	
Reference humidity			40%...60%	
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	

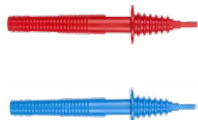


## Standard accessories



**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  
WAPRZ1X2BUBB



**M1 hanging straps**

WAP0ZSZE4



**M1 hanging  
hook straps**

WAP0ZUCH1



**M13 carrying case**

WAFUTM13



**4x LR6 1.5 V battery**



**Factory calibration  
certificate**

## Optional accessories



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

WASONYEOGB1



**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**