Indeks: WMPLMZC20E

SHORT-CIRCUIT LOOP IMPEDANCE METER

MZC-20E

The meter has been designed for fitters and measurement technicians performing services in residential buildings, office blocks, manufacturing plants and any facilities possessing a low-voltage electrical system. The instrument is also recommended for electrical maintenance personnel.

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MZC-20E

Measurements of impedance in a short-circuit loop Z_s within the range of 0.24…200 Ω

Short-circuit current IK: 0.115 - 1769 A (U^n=230 V)
AC voltage measurement: 0 - 440 V

Display range	Resolution	Accuracy
0,00...19,99 Ω	0,01 Ω	±(2,5% m.v. + 5 digits)
20,0...99,9 Ω	0,1 Ω	±(2,5% m.v. + 3 digits)
100...200 Ω	1 Ω	±(3% m.v. + 3 digits)

- Rated operating voltage U_{nL-N}/ U_{nL-L}: 220/380V, 230/400V, 240/415V
- Operating voltage range: 180…270V (for Z_{L-PE} i Z_{L-N}) and 180…440V (for Z_{L-L})
- Rated network frequency f_n: 50Hz, 60Hz
- Frequency operating range: 45…65Hz
- Maximum measurement current: 15,3 A for 230 V (10ms) and 26,7 A for 400 V (10ms)

Short-circuit resistance R_s and reactance X_s display range:

Display range	Resolution	Accuracy
0,00...9,99 Ω	0,01 Ω	±(5% m.v. + 5 digits) of Z_S value

- Calculated and displayed fori Z_S<10 Ω

Short-circuit current I_K display

Measuring range according to IEC 61557 can be calculated based on Z_S measuring range and rated voltage values.

Display range	Resolution	Accuracy
1,15…9,99 A	0,01 A	Calculated based on the accuracy for the short-circuit loop accuracy
10,0...99,9 A	0,1 A	
100...999 A	1 A	
1,00...9,99 kA	0,01 kA	
10,0…40,0 kA	0,1 kA	

Short-circuit loop impedance Z_s measurement

Measuring cable	Z_s measuring range
1,2m	0,24...200 Ω
5m	0,26...200 Ω
10m	0,28...200 Ω
20m	0,35...200 Ω

Voltage measurement

Display range	Resolution	Accuracy
0...440 V	1 V	±(2,5% m.v. + 2 digits)

Standard accessories:

- test lead 1.2 m, red	**WAPRZ1X2REBB**
- test lead 1.2 m, blue	**WAPRZ1X2BUBB**
- crocodile clip, K02	**WAKRORE20K02**
- pin probe with a banana plug, red	**WASONREOGB1**
- pin probe with a banana plug, blue	**WASONBUOGB1**
- rigid hanger with a hook	**WAPOZUCH1**
- carrying case for the instrument and accessories	**WAFUTM10**
- hanging straps	**WAPOZSZE4**
- SONEL CD	
- user manual	
- warranty card	
- calibration certificate	
- 4x LR6 batteries	

Optional accessories:

- test lead 5 m, red	**WAPRZ005REBB**
- test lead 10 m, red	**WAPRZ010REBB**
- test lead 20 m, red	**WAPRZ020REBB**
- pin probe with a banana plug	**WASONYEOGB1**
- pin probe 2 m, foldable	**WASONSP2M**
- AGT -16P adapter for 3-phase sockets, 5-wire version	**WAADAAGT16P**
- AGT -16C adapter for 3-phase sockets, 4-wire version	**WAADAAGT16C**
- AGT -32P adapter for 3-phase sockets, 5-wire version	**WAADAAGT32P**
- AGT -32C adapter for 3-phase sockets, 4-wire version	**WAADAAGT32C**
- AGT -63P adapter for 3-phase sockets, 5-wire version	**WAADAAGT63P**

Electrical safety:

- type of insulation	double, according to EN 61010-1 and IEC 61557
- measurement category	III 300 V according EN 61010-1
- protection class acc. to PN-EN 60529	IP67

Other technical data:

- power supply	LR6 alkaline batteries or NiMH rechargeable AA batteries (4 pcs.)
- dimensions	220x98x58 mm
- instrument weight incl. batteries	509g
- storage temperature	-20...+70°C
- working temperature	-10...+50°C
- humidity	20...80%
- reference temperature	+23 ± 2°C
- reference humidity	40...60%
- altitude	< 2000m
- Auto-OFF time	max. 900 sec.
- number of Z measurement (for rechargeable batteries)	>5000 (2 measurement/minute)
- display	LCD segment
- quality standard	developed, designed and manufactured acc. to ISO 9001
- the instrument is compliant with the requirements of	IEC 61557
- the instrument complies with	EN 61326-1:2006 and EN 61326-2-2:2006