MRU-10

Earth resistance meter

index: WMGBMRU10

CAT IV
150V

IP 67

MRU-10 is a simple meter that allows you to measure grounding by the use of the technical method and to measure grounding resistance by the use of the 2-pole method. The instrument is easy to handle, resistive to interference, and highly accurate. MRU-10 is a basic device that allows checking the quality of the grounding system on the basis of the received measurement result. Its ergonomic shape, durable and firm housing, as well as big and clear display make this instrument ideal to use both in the field and most working environments. The device is simple to operate and intuitive. It is the best choice for electrical installations contractors, technicians, and professionals dealing with grounding measurements.

It allows to take the measurements of:

- earthing resistance using auxiliary electrodes,
- earthing resistance using 2-pole method,
- interference voltage to 100 V,
- resistance of auxiliary electrodes R_H and R_S.

Additionally:

- indication of battery state,
- selection of maximum measuring voltage (25 V and 50 V),
- Auto-OFF function.

electric security	
type of insulation	double, according to EN 61010-1 and IEC 61557
measurement category	CAT IV 150 V wg EN 61010-1
protection class acc. to EN 60529	IP67
rated operational conditions	
operation temperature	-10...+50°C
storage temperature	-20...+60°C
referance temperature	+23 ±2°C
humidity	20...90%
other technical data:	
power supply	alkaline batteries or NiMH rechargeable batteries size AA (4 pcs.)
LCD display	segment, backlit
dimensions	221 x 102 x 62 mm
weight with batteries	approx. 660 g

standard accessories	
test lead 30 m, yellow, for MRU (banana plugs, on H-frame reel)	WAPRZ030YEBBN
test lead 15 m, red, for MRU (banana plugs, on H-frame reel)	WAPRZ015REBBN
test lead 2,2 m, black, 1 kV (banana plugs)	WAPRZ2X2BLBB
crocodile clip, black, 1 kV, 20 A	WAKROBL20K01
alkaline batteries 1.5V AA, LR6 (4 pieces)	
earth contact test probe (rod) 25 cm, (2 pieces)	WASONG25
M6 carrying case	WAFUTM6
M1 hanging straps	WAPOZSZE4
M1 hanging hook straps	WAPOZUCH1
user manual	
calibration certificate issued by production laboratory	
optional accessories	
earth contact test probe (rod), 30 cm	WASONG30
earth contact test probe (rod), 80 cm	WASONG80
cramp (banana plug)	WAZACIMA1
L3 carrying case for a 80 cm rods	WAFUTL3
test lead 25 m, red, for MRU (banana plugs, on a reel)	WAPRZ025REBBSZ
test lead 50 m, yellow, for MRU (banana plugs, on a reel)	WAPRZ050YEBBSZ
test lead 100 m, red, for MRU (banana plugs, on a reel)	WAPRZ100REBBSZ
test lead 200 m, yellow, for MRU (banana plugs, on a reel)	WAPRZ200YEBBSZ
crocodile clip, red, 1 kV, 20 A	WAKRORE20K02
crocodile clip, yellow, 1 kV, 20 A	WAKROYE20K02
calibration certificate issued by calibration laboratory	

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Measurement of earthing resistance (method 3-pole) R_E3p

Measurement range to IEC 61557-5:2007: 0,53 Ω...9999 Ω for U_n=50V

Range	Resolution	Accuracy
0,00...19,99 Ω	0,01 Ω	±(3% m.v. + 3 digits)
20,0...199,9 Ω	0,1 Ω	
200...1999 Ω	1 Ω	±5% m.v.
2000...9999 Ω	1 Ω	±8% m.v.

Measurement current: under short circuit >20mA. Frequency of measurement current: 125 Hz (for networks 50 Hz) and 150 Hz (for networks 60 Hz). Voltage on open terminals: selectable 25 V AC or 50 V AC.

Measurement of earthing resistance (method 2-pole) R_E2P

Range	Resolution	Accuracy
0,00...19,99 Ω	0,01 Ω	±(3% m.v. + 3 digits)
20,0...199,9 Ω	0,1 Ω	
200...1999 Ω	1 Ω	±5% m.v.
2000...9999 Ω	1 Ω	±8% m.v.

Measurement current: under short circuit >20mA. Frequency of measurement current: 125 Hz (for networks 50 Hz) and 150 Hz (for networks 60 Hz). Voltage on open terminals: selectable 25 V AC or 50 V AC.

Measurement of resistance of auxiliary electrodes R_H i R_S

Range	Resolution	Accuracy
0...999 Ω	1 Ω	±(5% m.v. + 8 digits)
1,00 k...9,99 kΩ	0,01 kΩ	
10,0 k...19,9 kΩ	0,1 kΩ	

Measurement of interference voltage U_N (RMS)

Range	Resolution	Accuracy
0...100 V	1 V	±(10% m.v. + 1 digit)

Check out our other novelties in the field of earth resistance measurement:

Long test leads for MRU on a reel (75 m, 100 m, 200 m).

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