

Insulation Tester PCE-IT100



Insulation tester PCE-IT100

For insulation resistance up to 4000 MΩ / CAT III 1000V / Easy handling Single or continuous measurement / Max / Min-value function

The insulation tester PCE-IT100 detects with auxiliary voltages of 125V, 250V, 500V and 1000V insulation resistors up to max. 4000 MΩ. Furthermore, the measurement of low-resistance resistors up to 400 Ω and a measurement function for alternating and also DC voltages is offered by this insulation tester. A continuity tester with a beep is also part of the equipment of the insulation meter. In addition to a data-hold function for holding the current measured value, the max. Or min. Value, in the insulation tester, can also be recorded during voltage and low-ohm measurement.

Thanks to the large numbers and the lighting, the display of the insulation tester is easy to read even under difficult lighting conditions. The large buttons and the rotary knob for selecting the measuring functions allow easy operation of the PCE-IT 100 insulation meter. The insulation tester comes with a set of test leads with test probes, a test lead with crocodile clip and 6 batteries.

Observed limits for insulation measurement

- ▶ For new plants (dry rooms): 1000 ohms x volts of operating voltage(eg at 230 volts> 230 kOhms)
- ▶ For new installations (wet rooms, outdoors): 500 ohms x volts of operating voltage
- ▶ Earthed devices: 1000 ohms x volts of operating voltage
- ▶ Protected devices: 2 MOhm
- ▶ Power tools: 2 MOhm
- ▶ Protective extra-low voltage: 250 kOhm
- ▶ Electrical measuring devices: 5 MOhm
- ▶ Common test voltage values are 100 volts for low voltage and telecommunication systems, 500 voltsfor building installation and home appliances, 1000 volts for low voltage motors and transformers
- ▶ Large measuring range
- ▶ 4 different test voltages up to 1 kV
- ▶ Auto power-off function
- ▶ Safety: EN 61010-1, CAT III 1000V
- ▶ Dual display with backlight
- ▶ Carrying case included
- ▶ Single measurement and continuous measurement
- ▶ **An ISO calibration certificate is available as an option**

Subject to change

Specifications

Measuring range

AC voltage (40 ... 400 Hz) 750V

Resolution 1V

Accuracy $\pm 0.8\% \pm 3 \text{ dgt}$

DC voltage 1000V

Resolution 1V

Accuracy $\pm 1.2\% \pm 10 \text{ dgt}$

Resistance 40 Ω / 400 Ω

Resolution 0.01 Ω / 0.1 Ω

Accuracy $\pm 1.2\% \pm 3 \text{ dgt}$

Insulation resistance 4 M Ω / 40 M Ω / 400 M Ω / 4000 M Ω

Resolution 0.001 M Ω / 0.01 M Ω / 0.1 M Ω / 1 M Ω

Insulation resistance

125V $\pm (2\% + 10 \text{ dgt}) / \pm (2\% + 10 \text{ dgt}) /$
 $\pm (4\% + 5 \text{ dgt}) / \pm (5\% + 5 \text{ dgt})$

250V $\pm (2\% + 10 \text{ dgt}) / \pm (2\% + 10 \text{ dgt}) /$
 $\pm (3\% + 5 \text{ dgt}) / \pm (4\% + 5 \text{ dgt})$

500V $\pm (2\% + 10 \text{ dgt}) / \pm (2\% + 10 \text{ dgt}) /$
 $\pm (4\% + 5 \text{ dgt}) / \pm (4\% + 5 \text{ dgt})$

1000V $\pm (3\% + 10 \text{ dgt}) / \pm (2\% + 10 \text{ dgt}) /$
 $\pm (2\% + 5 \text{ dgt}) / \pm (4\% + 5 \text{ dgt})$

Continuity test Beep: $\leq 35 \Omega$, test current $\leq 200\text{-mA}$

Equipment supply 6 x 1.5V AA battery

Environmental conditions 0 ... 40°C / 32 ... 104°F, <80% RH (operation)
-10 ... 60°C / 14 ... 140°F, <70% RH (bearing)

Dimensions 200 x 92 x 50 mm / 7.9 x 3.6 x 2 in

Weight 700 g / 1.5 lbs (with battery)

Standardizations IEC10101, CAT III 1000V

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