

Code: UT-593

MULTIFUNCTION METER FOR ELECTRICAL INSTALLATIONS **UT-593** UNI-T

The UT-593 is a multifunction meter for measurements in electrical installations, dedicated to electricians. The device is also a comprehensive tester for the safety of electrical installations. The UT-593 allows you to measure insulation resistance, short circuit loop impedance with/without RCD tripping, line impedance, continuity of protective and equalizing conductors, test of trip current and RCD tripping time, AC voltage value, and the phase sequence display.

Attention! High voltage is required to correctly measure the insulation resistance value. During the measurement one should be particularly careful and strictly follow the recommendations included in the device manual.



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| Resistance measurement: | <ul style="list-style-type: none"> • Test voltage 250 V : 0.05 MΩ ... 250 MΩ • Test voltage 500 V : 0.05 MΩ ... 500 MΩ • Test voltage 1000 V : 0.05 MΩ ... 1000 MΩ |
| Measuring accuracy: | 0.05 MΩ ... 1000 MΩ ± (5% + 5) |
| Open circuit voltage: | Test voltage ± 10 % |
| Test current: | 0.9 mA ... 1.1 mA |
| Short-circuit current: | < 1.8 mA |
| AC voltage measurement: | 0 V ... 440 V ± (2% + 3) @ 1 V |
| DC voltage measurement: | 0 V ... ± 440 V ± (2% + 3) @ 1 V |
| Measurement of small resistances: | 0.01 Ω ... 200 Ω ± (2% + 5) |
| Frequency measurement: | 20 Hz ... 100 Hz - for reference only |

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| Test of RCDs: | <ul style="list-style-type: none"> Working voltage: 220V \pm 10 % Test current: 10mA / 30mA / 100mA / 300mA / 500mA Switch-off time ranges : <ul style="list-style-type: none"> - 0 ... 2000 ms \pm (5% + 5) @ 1/2 x nominal value of the residual current - 0 ... 500 ms \pm (5% + 5) @ 1 x nominal value of the residual current, Selective RCD - 0 ... 300 ms \pm (5% + 5) @ 1 x nominal value of the residual current - 0 ... 40 ms \pm (5% + 5) @ 5 x nominal value of the residual current |
| RCD tripping current measurement: | Increasing current test: 10 mA / 30 mA / 100 mA / 300 mA / 500 mA \pm 10 % |
| RCD automatic test: | ✓ |
| Phase sequence test: | 100 V ... 440 V / 45 Hz ... 65 Hz |
| Continuity measurement of protective and equalizing conductors: | 0 Ω ... 199 Ω \pm (2% + 5) Measuring current > 20 mA @ 0 ... 2 Ω |
| Line impedance measurement (L-N): | <ul style="list-style-type: none"> 0.05 Ω ... 1.99 Ω \pm (5% + 5) 2 Ω ... 19.99 Ω \pm (5% + 5) 20 Ω ... 2000 Ω \pm (5% + 5) Measuring current : 20 A / 20 ms Measuring range of prospective short-circuit current : 0 ... 26 kA |
| Short circuit loop impedance measurement (L-PE): | <ul style="list-style-type: none"> 0.05 Ω ... 1.99 Ω \pm (5% + 5) 2 Ω ... 19.99 Ω \pm (5% + 5) 20 Ω ... 2000 Ω \pm (5% + 5) Measuring current : 20 A / 20 ms Measuring range of prospective short-circuit current : 0 ... 26 kA |
| Automatic change of measuring ranges: | ✓ |
| RS-232: | — |
| USB: | — |
| Main features: | <ul style="list-style-type: none"> Warning of using high voltage during the measurement, Phase switch 0° / 180° during RCD test, Automatic identification of AC/DC voltage, Reset function for measuring low resistances, Large, readable LCD display with backlight, Buzzer, Automatic power-off, Low battery indicator, Aesthetic and solid construction |
| Operation temp: | 0 °C ... 40 °C |
| Permissible relative humidity: | \leq 85 % (non-condensing) |
| Power supply: | 8 x 1.5V, type AA/LR6/FR6 battery - included |
| Weight: | 1.1 kg |
| Dimensions: | 210 x 175 x 90 mm |
| Manufacturer / Brand: | UNI-T |
| Guarantee: | 2 years |