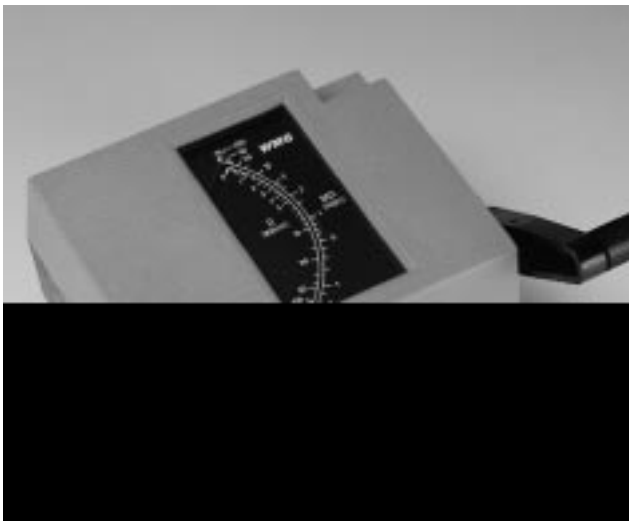
WM6
Insulation and Continuity Tester



- **Pocket-sized, self-powered instrument - no battery maintenance problems**
- **Tests at 500 volts d.c.**
- **Powered by an easy-to-turn, low-voltage, ac brushless generator**

DESCRIPTION

The Megger® WM6 tester is a self-contained instrument designed to give rapid and accurate resistance measurements. The hand-operated generator is coupled with the latest electronic technology, thus allowing the WM6 to test insulation at 500 V d.c. up to 200 MΩ.

A low-voltage, hand-cranked, a.c. brushless generator, which is easy to turn by hand, is the power source. It is connected to a stabilized electronic invertor to provide the test voltage. All resistance readings are given directly on a moving-coil meter with a rugged taut-band suspension movement, a white-on-black scale and an orange “dayglow” pointer. This gives goodlegibility in most lighting conditions.An electronic circuit is used to give a four-decade resistance scale for insulation measurement.

There is a slider switch for selection of either the insulation resistance or continuity functions, and the strong ABS plastic case has a recess to accommodate the folded-away generator handle for compactness. Two 4-mm terminal sockets are fitted into the side of the case for connecting the test leads.

APPLICATIONS

The WM6 tester is suitable for the direct measurement of insulation resistance and continuity of domestic and industrial wiring, cables, transformers, motors, generators, electrical machinery and appliances. It is suitable for use during installation and commissioning work as well as servicing and maintenance applications.

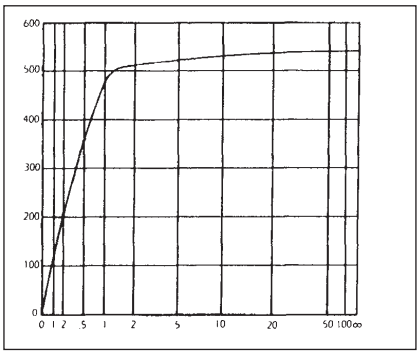
The WM6 may be used to measure the insulation resistance of 415/240-V a.c. wiring installations to prove that they comply with wiring regulations.

FEATURES AND BENEFITS

- Pocket-sized, self-powered instrument — no battery maintenance problems
- Tests at 500 V d.c.
- Powered by an easy-to-turn, low-voltage, a.c. brushless generator
- Stabilized electronic invertor
- Resistance readings given directly on a moving-coil analogue meter
- Simple, two-position function selector switch
- Robust ABS plastic case

Insulation Test to Earth

Where possible, the main isolating switch should be included in the test. On new installations not yet energized, the main switch can be included. Where existing installations are being tested, the first step when conducting a test is to open the main isolating switch. For a new installation not yet connected to the supply, join together the phase and neutral wires (red and black tails) on the input side to the main isolating switch. Connect these to the L , '–' or black terminal of the insulation tester. For an existing installation, join together the phase and neutral (L and N) contacts on the installation side of the main switch. Connect these to the L , '–' or black terminal of the insulation tester. Connect the E, '+' or red terminal of the insulation tester to the earth point at the main switch.



Terminal voltage characteristics

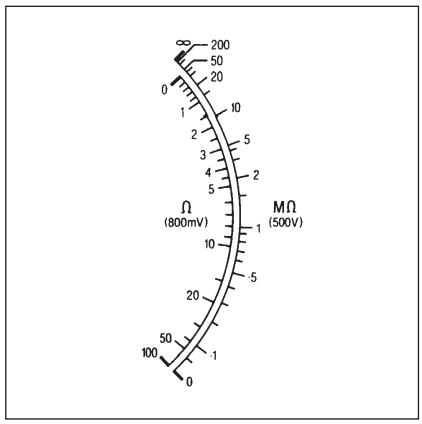
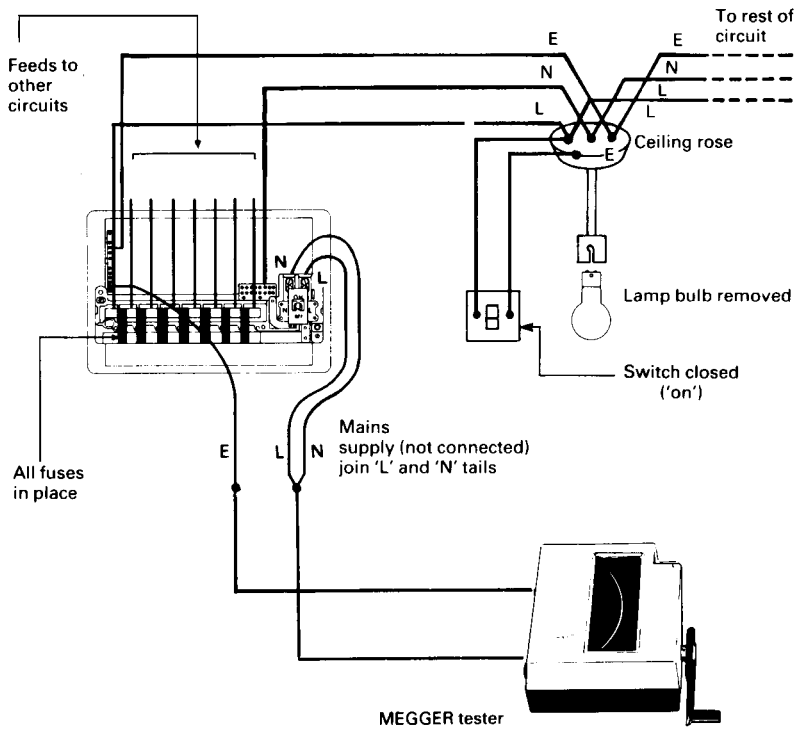


Illustration of typical scales (not full size)



Insulation test to earth on a wiring installation

SPECIFICATION

Ranges
Insulation:

0 to 200 MΩ and ∞

Continuity:

0 to 100 Ω

Terminal Voltage on Open Circuit (d.c.)
Insulation Range:

<600 V

Continuity Range:

800 mV approx

Terminal Voltage at 1-MΩ Load (d.c.)
Insulation Range:

500 V +10%, -5%

Terminal Current on Short Circuit
Insulation Range:

1,3 mA approx

Continuity Range:

55 mA approx

Voltage Stability, 160 to 240 RPM

Insulation Range:

< ±1%

Ripple Content at 160 RPM on Open Circuit

Insulation Range
500 mV peak-to-peak approx

Accuracy
1,5 mm (0,060 in.) from any marked position on the scale when measured against standard resistors

Temperature
Operating:

-10 to +50°C

Storage:

-20 to +70°C

Flash Test
2,3 kV a.c. rms

Voltage Source (d.c.)
Brushless a.c. hand-cranked generator with rectifier and a.c.-to-d.c. converter

Fuse
1 A ceramic, 20 x 5 mm

Dimensions
61 H x 131 W x 98 D mm
2,4 H x 5,1 W x 3,9 D in. approx

Weight
650 g (1,5 lb approx)

ORDERING INFORMATION

Item (Qty)	Order Code
Insulation and Continuity Tester	WM6
Included Accessories	
Test lead set including shrouded crocodile clips	
Operating instruction book	

Item (Qty)	Order Code
Optional Accessories	
Leather test-and-carry case with special compartment for test leads	6420-088
Companion carrying case, leather covered, for WM6 and one similar tester, e.g., a loop tester, plus all test leads	6420-004

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OTHER TECHNICAL SALES OFFICES
Valley Forge USA, Toronto CANADA, Mumbai India and BAHRAIN.

Megger products are distributed in 146 countries worldwide.

ISO STATEMENT
Registered to ISO 9001:1994 Reg no. Q 09250
Registered to ISO 14001 Reg no. EMS 61597

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