

## MEGGER® WM6

- 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

# Insulation and Continuity Tester

## DESCRIPTION

The Wee 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 M $\Omega$ .

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 inverter 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 good legibility 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 inverter
- Resistance readings given directly on a moving-coil analogue meter
- Simple, two-position function selector switch
- Robust ABS plastic case

## SPECIFICATIONS

### Ranges

**Insulation:** 0 to 200 M $\Omega$  and  $\infty$

**Continuity:** 0 to 100  $\Omega$

### Terminal Voltage on Open Circuit (d.c.)

**Insulation Range:** <600 V

**Continuity Range:** 800 mV approx

### Terminal Voltage at 1-M $\Omega$ 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:** <  $\pm 1\%$

### 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)

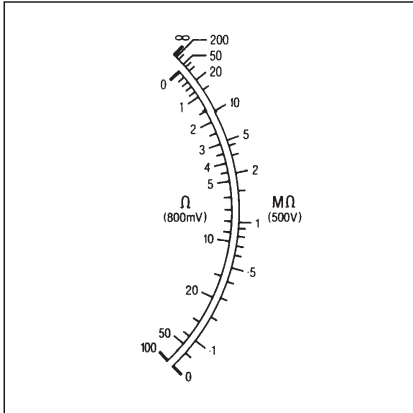
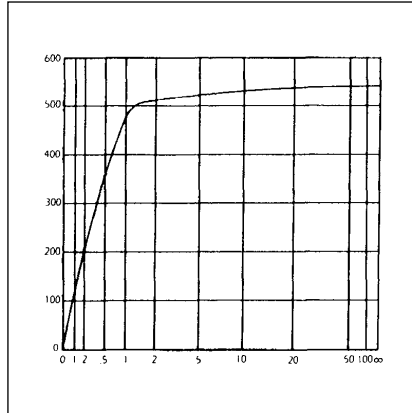


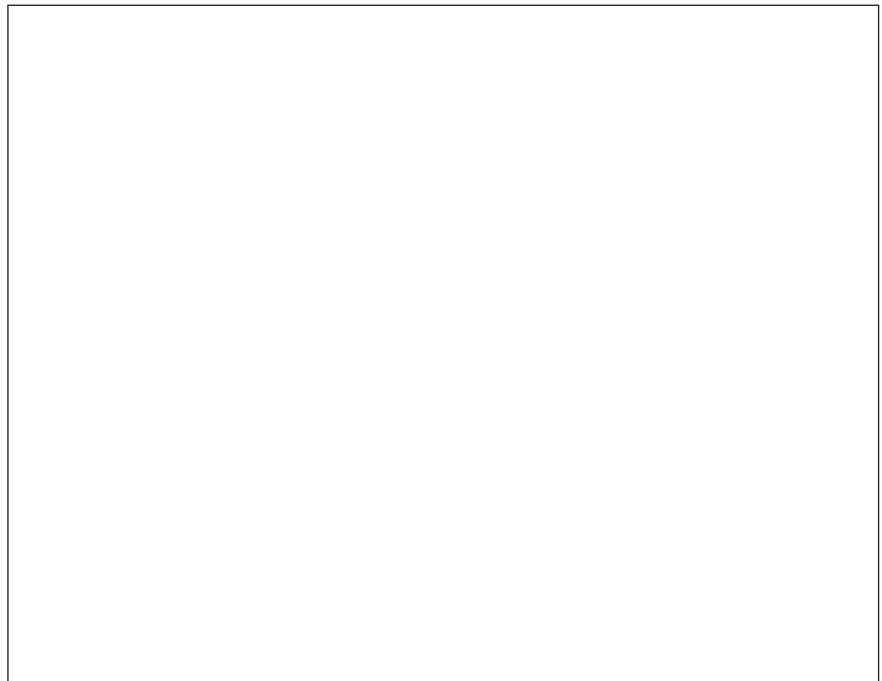
Illustration of typical scales (not full size)



Terminal voltage characteristics

**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.



Insulation test to earth on a wiring installation

**ORDERING INFORMATION**

Item (Qty)	Order Code	Optional Accessories	Order Code
Insulation and Continuity Tester .....	WM6	Leather test-and-carry case with special compartment for test leads .....	6420-088
<b>Included Accessories</b>		Companion carrying case, leather covered, for WM6 and one similar tester, e.g., a loop tester, plus all test leads.....	6420-004
Test lead set including shrouded crocodile clips			
Operating instruction book			