

## Insulation tester

The insulation resistance of an installation must be checked periodically and when it is commissioned. Furthermore, a measurement of the insulation resistance of the entire installation (or group of circuits) may be necessary when troubleshooting.

CEI 61010-1  
EN 61557-2

CE

### Operating principle

The measurement voltage shall be 500 V DC (for installations operating at 500 V or less) in order to detect any insulation defect between two cables that are normally isolated from each other. The choice of a high test voltage provides an easier means of demonstrating a latent insulation fault (conventional ohmmeters only output a few volts).

An installation is declared to be conform if the insulation resistance is  $> 500 \text{ k}\Omega$ .

The DT-500 insulation tester provides an easy, fast and safe means of making this measurement.

The insulation tester DT-500 is designed to test in total safety the insulation resistance of a low voltage installation.

### DT-500 is equipped with:

- 3 safety test probes IP2X
- 1 red safety test probe (phase)
- 1 Yellow/green safety test probe (earthing)
- 1 blue safety test probe (neutral) raccordable (Fig.3) on a safety plug
- 3 safety crocodile clamps (red, yellow/green and blue).

It enables to test the insulation resistance between each active wire and the earth (Fig.1). For fragiles receptors (electronics), we recommend to use the third blue test probe.

In this configuration, the neutral and the phase are linked together which avoids any damage on electronic components (Fig.2).

### Insulation resistance test

*When the DT-500 is connected to a low voltage switch off installation it output 500 V DC.*

Signaling by a blue flashes diode. During the measurement the diodes light up in sequence.

The value is indicated on one of the diodes:

Red between: 0, 300, 400 k $\Omega$ .

Green between: 500, 600, 700, 800, 900, 1000 k $\Omega$  and  $\infty$ .

### Complete safety

The DT-500 is equipped with a safety system. If it is connected on a live installation, a flashes red warning diode light and measurement is impossible.

### Technical characteristics

our insulation tester is designed according to standard EN 61557-2.

It also respects international electrical safety standard IEC 61010-1.

- Output voltage 500 V DC.
- Nominal output current at 500 V: 1 mA.
- Measurement range 0 +  $\infty$ .
- IP54, IK06.
- Batteries 4 x LR6.
- Size 213 x 75 x 46 mm.
- Storage temperature: -25 °C/+70 °C.
- Usage temperature: -15 °C/+45 °C.

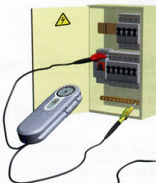


Fig. 1

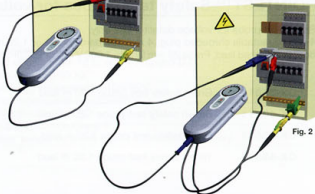


Fig. 2



Fig. 3



**DT-500** Delivered complete with batterie, accessories and a storage plastic case  
Weigh: 0.6 kg

**M-87292** Storage bag for DT-500 - 280 x 180 x 70



M-87-292