CATHODIC PROTECTION CO LIMITED

SOIL RESISTIVITY METERS

REVISION 1

DET4TC & DET4TCR DIGITAL GROUND TESTERS

- IP54 rated
- 2, 3 and 4 point testing
- Selectable 25 V or 50 V output
- Dry cell or rechargeable versions
- Simple one button operation
- Robust carry case
- Delivered with calibration certificate

DESCRIPTION

Megger's DET4 family of ground testing instruments offers a unique solution to your ground rod and soil resistivity testing needs. The basic kit option comprises, the instrument, test leads, stakes, batteries and calibration certificate delivered in a tough polypropylene carry case - everything you need to start testing in one kit.

The ground testers are rated to IP54 making it truly an outdoor instrument. The ground tester has been designed to be easy to use, a large selector switch makes selection of 2 pole, 3 pole or 4 pole test easy with gloved hands – and the design makes the fitting of shorting links to perform 2 pole tests a thing of the past. A large, clear, easy to read LCD display and thumb sized test button again makes the instrument particularly suited to the outdoor conditions of ground testing.

In addition to this ease of use the ground tester also automatically checks the connection and condition of the P spike and the C spike, indicating the status on the display. The instrument also includes a voltmeter to allow you to measure the ground voltage. The ground tester can measure resistance from 0.01 Ω through to 20 k Ω and earth voltages up to 100 V. To allow testing in noisy environments the instrument is capable of rejecting noise of up to 40 V peak to peak.

The DET4TD2 digital ground tester is powered from 8 AA batteries which are widely available and deliver excellent testing time. The DET4TR2 is powered from rechargeable AA cells.

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The battery charger is built in and the instrument is supplied with an AC/DC adaptor. For both instruments, the battery status is displayed using a bar-graph.

The Megger ground testers comply with stringent safety standards and are rated to 100 V CAT IV. They also have selectable 25 V or 50 V output for compliance with IEC 61557-5.

DESCRIPTION

Display:
3 ½ high contrast liquid crystal

Battery type:
DET4TD2 8 off AA (LR6) cells
DET4TR2 8 off AA (LR6) NiMH rechargeable cells

Operating temperature range:
-15 to +55°C / 5°F to 131°F

Storage temperature range:
-40 to +70°C / -40°F to 158°F

Safety:
Complies with the requirements of EN61010-1
100 V CAT IV between terminal pairs.

EMC:
In accordance with IEC61326 including amendment No. 1

Standards Compliance:
Complies with the requirements of KEMA K85B.
Complies with the following parts of EN61557,
"Electrical safety in low voltage distribution systems up to 1000 V AC and 1500 V DC - Equipment for testing, measuring or monitoring of protective measures".
Part 1 - General requirements
Part 5 - Resistance to earth

Dimensions:
203 x 148 x 78 mm (8 x 5.8 x 3 inches)

Weight:
1 kg (2.2lb)

Ingress protection:
IP54

C spike, P stake and noise check:
Automatic

Noise rejection:
40 V peak to peak

2-wire, 3-wire test, 4-wire test:
Yes, no shorting links required

Instrument output:
Voltage: ±25 V or ±50 V at 128 Hz
Current: 4.5 mA or 0.45 mA

Resistance range:
0.01 _ to 20 kΩ
0.02

Earth voltage range:
0 - 100 V

Resistance accuracy:
2P measurements: 2% ±3 digits
3P measurements: 2% ±3 digits
4P measurements: 2% ±3 digits

Maximum probe resistance:
Rp limit: 100 kΩ (50 V output voltage)
Rc limit: 100 kΩ (50 V output voltage)
Limits reduced to 50 kΩ for 25 V output voltage
Limits reduced to 5 kΩ for 0.01 Ω resolution

Ground voltage range:
0 to 100 V a.c.

Ground voltage accuracy:
2% ±2 V

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