MPH10
Hi-Pots

- **Test voltage starts at zero crossing.**
- **Transient free voltage.**
- **Press to test or toggle ON / OFF.**
- **Calibrated trip settings.**
- **Three fail modes**
  - **Breakdown only**
  - **Excessive leakage only**
  - **Breakdown or excessive leakage**
- **Optional remote on / off switch.**
- **Provision for safety interlocks.**
- **Outputs for external fail indication**
- **Output for “High voltage on” beacon.**

DESCRIPTION

The Megger® MHP10 is designed for workshop and production testing of electrical items. The MHP10 has an a.c. output voltage.

It is compact and readily portable so that they may be easily moved to the item that needs testing.

TESTING

Many standards call for the a.c. testing of items to ensure their electrical robustness.

The output voltage is applied between a grounded low voltage terminal and a hot high voltage safety terminal. For increased safety, an additional ground connection is available on the rear of the instrument. This provides a second earth path protecting the user in the event of the ground supply becoming faulty.

The test voltage is controlled by a manually operated variac. A simple jumper setting decides how the voltage is applied as follows:

- For short duration tests the jumper is set for manual mode, and under this setting the voltage is only applied as long as the start button is depressed.

- For longer duration tests, the jumper is set to toggle mode. In this mode the start button will begin the test voltage output, which will continue until the stop button is depressed.

In either mode the test voltage application starts at a zero crossing and will be applied without overshoot.

At the conclusion of a test, the stopping of the high voltage output initiates a discharge of the item previously tested.

TEST FAIL MODE

The Megger MHP10 may be used in three test modes:

Breakdown only

This mode ignores the actual magnitude of the leakage current and looks for a sharply rising current waveform edge, characteristic of insulation breakdown.

Trip

The second mode will only trip the test voltage if the leakage current flowing exceeds a pre-selected calibrated maximum.

Breakdown / Trip

This mode is a combination of the two previous modes. The test voltage will be removed if either a breakdown is detected or if the leakage current through the item under test exceeds the pre-set maximum.

A simple rotary switch selects the maximum permissible leakage current from one of seven calibrated settings.

SAFETY

High voltage testing is intrinsically dangerous and it is therefore recommended that testing should take place in a designated high voltage testing area.

The instrument has visual indication of “High Voltage ON”, and visual and audible indication of a test failure.

To facilitate a fixed installation, the instrument is provided with the facility to attach various safety devices:

Safety interlocks may be attached to the instrument to prevent the application of high voltage unless safety barriers are in place.

A socket is provided to allow the use of the optional remote On / Off switch thereby ensuring the operator’s hands are well removed from the danger area.

Terminals are provided for the connection of a warning beacon that illuminates whenever high voltage is present.

Terminals are provided for external signalling of a test failure.

The MHP10 is your ideal testing companion.

SPECIFICATIONS

Test Voltage:

MHP10

0-3kV a.c. continuously variable

Current trip settings:

0.5, 3.5, 10, 20, 30, 40, 50 mA. Peak

Current trip accuracy:

±5% of indicated value.

Display

Voltage - Analogue Movement 60 mm. (2.36”) scale length

Display Accuracy: ±2.5% of full-scale deflection

Features

Remote switch:

5-pin DIN connector on rear of instrument allows connection of remote voltage ON/OFF switch (see optional accessories)

Safety interlocks

Provision on rear of instrument for wiring safety interlocks

Beacon:

Provision on rear of instrument to wire in a “Voltage ON” warning beacon. Maximum current available 0.5A at supply voltage

Pass/Fail indicator:

Normally open/normally closed terminals available to power external indicator. Max rating 8A at 250 V a.c.

Power Supply:

230 or 115 V a.c. 50/60Hz depending on model.

Safety

Meets the requirements of IEC 1010-1 (1995) and EN 61010-1 (1995)

Fuses

2x T2A HBC 32 x 6.5 mm (1¼” x ¼”)

Power cord (where applicable): 3A fuse to BS1362.

EMC

In accordance with IEC61326 including Amendment No.1

Temperature

Operating: 0˚C to 40˚C (32˚F to 104˚F)

Storage: -20˚C to 60˚C (32˚F to 140˚F)

Humidity

Operating:

80% RH at 40˚C (104˚F)

Dimensions

257 x 280 x 110 mm. (11 x 11½ x 4¾ inches)

Weight

8 kg. (17.6lb.)

Cleaning

Wipe disconnected instrument with a clean cloth dampened with soapy water or Isopropyl Alcohol (IPA)

ORDERING INFORMATION

Item	Order Code
a.c. Hipot (230V, UK plug)	MHP10 UK230
a.c. Hipot (230V, Schuko plug)	MHP10 EUR230
Include Accessories	
User Guide	6172-636
Low return lead	6220-309
4kV High Voltage probe	5310-406
Mains power Cord (UK230)	25970-028
Mains power Cord (EUR230)	6180-334
Mains power Cord (US115)	25970-002
Optional Accessories	
High Voltage Gun Probe	6420-061
Remote On/Off switch	6220-641
120 kohm resistor	6121-447

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OTHER TECHNICAL SALES OFFICES
Valley Forge USA, Toronto
CANADA, Mumbai INDIA,
Le Raincy FRANCE, Cherrybrook
AUSTRALIA, Guadalajara SPAIN
and The Kingdom of BAHRAIN.

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

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