



HVT Series

AC-DC Hi Pot Test Set

The Motwane's Hi-Pot Tester, HVT series offers a wide range of test voltages to determine the withstand strength of electrical insulation for the normally occurring over voltage transients. HVT series sets are available in a wide range of voltage and power ratings with exceptional reliability, durability and functionality which can generate AC, DC or AC+DC voltages (eliminates the need of two separate kits). Available with manual / motorized controlled operation provides variable output voltage. Test sets had selectable tripping current to identify breakdown voltage of different test objects and also have timer, useful to set duration of test period. HVT series is provided with HV indication, supply fault / earth open interlocking & door / cabin interlocking & overload protection provided for safety of operator & test set.

Features

- ✓ Variable Output Voltage AC/DC/AC+DC
- ✓ Selectable Trip Current
- ✓ Zero Start Interlock
- ✓ Timer to set duration of test
- ✓ Audio/Visual Indications
- ✓ Overload Protection
- ✓ High Leakage Current Range
- ✓ Supply Fault / Earth Open Interlocking Door / Cabin Door Interlock
- ✓ Wheel mounted for easy transportation

Applications

Dielectrics (insulation) for electrical equipment and apparatus is used for many different applications. It is expressed for a wide range of environmental conditions such as temperature, moisture, chemicals, other contaminants, and exposure to weather. One major factor affecting insulation life is thermal degradation, although moisture, contamination, voltage stress, and other factors may also contribute to its degradation. In addition, the life of an insulating material depends on the degree of loading, the type of service to which the equipment is subjected, the care it receives during installation and operation, and mechanical vibration and forces to which it is subjected.

A dielectric withstand test is an electrical test performed on a component or product to determine the strength of insulation. Voltage applied between equally insulated sections of a part or energized parts and electrical ground under test and determining the leakage current that may flow under test conditions. Excessive leakage current flows may indicate a deteriorated condition or impending failure of the insulation. Insulation testing can be performed by applying either direct current (DC) voltage or alternating current (AC) voltage. The test to qualify a device's ability to operate safely during rated electrical conditions. If the current through a device under test is less than the specified limit at the required test potential and time duration, the device meets the dielectric withstand requirement. A dielectric withstand test may be done as a factory test on new equipment, or may be done on apparatus already in service as a routine maintenance test.

Typically used for

- Transformer/Motor/ Generator/Switchgear testing
- Insulated Electric Apparatus & Components
- Power Cables.
- Aerial Lift Equipment/Bucket Trucks
- Domestic appliance testing
- Capacitor Coils & chokes

Technical Specification

Model	MOT-HVT5	MOT-HVT10	MOT-HVT15	MOT-HVT20	MOT-HVT30	MOT-HVT40	MOT-HVT50	MOT-HVT70
Output Voltage	5KV	10KV	15KV	20KV	30KV	40KV	50KV	70KV
Tripping Current	Options 1) 50mA or 2) 100mA, Selectable at (25%-50%-100%) of full range							
Burden at 50mA	0.25KVA	0.5KVA	0.75KVA	1KVA	1.5KVA	2KVA	2.5KVA	3.5KVA
Burden at 100mA	0.5KVA	1KVA	1.5KVA	2KVA	3KVA	4KVA	5KVA	7KVA
Type of Voltage	AC/DC/AC+DC							
Display (V/I/T)	Digital Meter							
Voltage Meter	0-5KV	0-10KV	0-15KV	0-20KV	0-30KV	0-40KV	0-50KV	0-70KV
Voltage Accuracy	±2% of full scale reading ±2 digits							
Voltage Resolution	0.1KV							
Current Accuracy	±2% of full scale reading ±2 digits							
Mains Supply	230 V ±10%, 1 Phase AC, 50/60 Hz							
Duty Cycle	15 min On, 10min Off							
Timer	0-999 seconds Digital Timer							
Time Accuracy	±0.05% of full scale reading							
Operation Mode	Manual				Motorized			
Colling Type	Air cooled							
Indication	Bright LED for Power ON & Test ON							
Protection and Safety	Protected by MCB, Fuse Zero Start Interlock Earth Open/ Supply Fault Interlock, Door/ Cabin Interlock							
Operating Temperature	0-55°C, 5-90% RH Non Condensing							

*We also provide customized High voltage test set as per requirement

Ordering Information

Model	Products Detail
MOT-HVT5	5KV High Voltage Tester
MOT-HVT10	10KV High Voltage Tester
MOT-HVT15	15KV High Voltage Tester
MOT-HVT20	20KV High Voltage Tester
MOT-HVT30	30KV High Voltage Tester
MOT-HVT40	40KV High Voltage Tester
MOT-HVT50	50KV High Voltage Tester
MOT-HVT70	70KV High Voltage Tester

Note: while ordering need to mention 1) Type of voltage : AC, DC or AC-DC
2) Tripping Current : 50mA or 100mA

Accessories

Standard

- Grounding Cable
- Instruction Manual
- Warranty Certificate
- Calibration Certificate
- Non shielded HV Cable
- Spare Fuse

Optional

- Interconnecting Cable
- Discharge Rod



HVT 100kV

DC Hi Pot Test Set

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Loading Unit



Accessories

Features

- ✓ Variable Output Voltage, 100 kV DC
- ✓ Selectable Trip Current
- ✓ Zero Start Interlock
- ✓ Timer to set duration of test
- ✓ Audio/Visual Indications
- ✓ Overload Protection
- ✓ High Leakage Current Range
- ✓ Supply Fault / Earth Open Interlocking Door / Cabin Door Interlock
- ✓ Wheel mounted for easy transportation

Applications

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Typically used for

- Transformer/Motor/ Generator/Switchgear testing
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- Capacitor Coils & chokes

Technical Specification

Model	MOT- HVT100
Output Voltage	100kV
Tripping Current	5mA (Selectable at 2.5 mA & 5 mA)
Burden at 5mA	500VA
Type of Voltage	DC
Display (V/I/T)	Digital Meter
Voltage Meter	0-100kV
Voltage Accuracy	±2% of full scale reading ±2 digits
Voltage Resolution	0.1kV
Current Meter	0-5mA (It can display the discharge current of the test object)
Current Accuracy	±2% of full scale reading ±2 digits
Current Resolution	0.001 mA
Ripple Coefficient	Less than 2.5%
Output Polarity	Positive polarity is grounded, negative polarity output"
Mains Supply	110 ~ 220V ±10%, 1 Phase AC, 50/60 Hz
Duty Cycle	15 min On, 10min Off
Timer	0-999 seconds Digital Timer
Time Accuracy	±0.05% of full scale reading
Operation Mode	Motorized
Colling Type	Air cooled
Indication	Bright LED for Power ON & Test ON
Protection and Safety	Protected by MCB, Fuse Zero Start Interlock Earth Open/ Supply Fault Interlock, Door/ Cabin Interlock Protection against output current Protection against overload and damage due to surge and collapse of the test object
Operating Temperature	0-55°C, 5-90% RH Non Condensing

Weight Control unit : 30 Kg Approx.

Loading unit : 60 Kg Approx

Dimensions Control Unit : 483 mm x 310 mm x 300 mm

Loading Unit : 450 mm x 450 mm x 350 mm

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Accessories
Standard

■ Grounding Cable - 10 mtr.	: 1 Nos
■ Instruction Manual	: 1 Nos
■ Warranty Certificate	: 1 Nos
■ Calibration Certificate	: 1 Nos
■ Non shielded HV Cable 15 mtr.	: 1 Nos
■ Spare Fuse	: 1 Nos
■ Power Cord 15 mtr., 15 A	: 1 Nos
■ Carrying Bag for Accessories	: 1 Nos