



DC Hipot Test Instrument Model M100DC

Safe, Fast, Efficient

- Performs DC dielectric withstand test up to 5.5 KVDC at 10 milliamperes (5mA standard)
- Performs concurrent ground continuity test
- ARC and OVERCURRENT detection circuits
- Fast HV shutdown within 2 milliseconds
- Fast discharge of Device Under Test (DUT) upon shutdown
- Full compliance with UL, VDE, BSI, IEC, CSA, and other test standards

Production/Quality Assurance Testing

- Fully Automatic test cycle
- detects and indicates the following:
 - Test Ready (Security Chassis Ground Sensed)
 - Test in Progress
 - Test Passed
 - Test Failed
- following test parameters easily preset via rear panel potentiometers:
 - voltage ramp
 - · test time
 - test voltage
 - · overcurrent trip point
- switch-selectable ramp & test time combinations
- arc detection circuit
- overcurrent detection circuit
- solid state HV generation and control system for reliability
- switchable "burn" feature permits destructive testing by maintaining output voltage, following failure, to the DUT throughout duration of preset test time
- can be interconnected with M25 Ground Continuity Test Instrument or any Rod-L AC Hipot Test Instrument to simplify multiple testing requirements



Continuous Ground Continuity Monitoring

- monitors Ground Continuity of DUT before and during each Hipot Test
- senses for 0.5Ω (standard), at ≈ 1.5 VAC
- loss of safety ground connection during a test causes high voltage to shut down with both audible and visual failure indication
- inhibits application of high voltage if the security chassis ground is not secure

Superior Safety Features

- front panel receptacle is rated to 8000 VAC
- front panel receptacle prevents direct operator exposure to high voltage during test
- shutdown within 2 milliseconds after dielectric breakdown, overcurrent, or ground continuity fault
- electronically controlled output voltage ramp rate circuit guarantees consistently smooth ramp
- visual (audible optional) indication of high voltage applied to DUT
- discharge circuit provides for rapid discharge of DUT following shutdown
- visual and audible indication of the following:
 - arc detection
 - · excessive overcurrent flow
 - · ground continuity test failure



Specifications



Output Voltage 5500 VDC, user adjustable

Output Voltage Ramp Rate 50 v/sec to 5000 v/sec, user adjustable

Output Current 5mA (standard, 10mA maximum)

Test Time 1 second to 90 seconds, user adjustable

Shutdown Time 2 milliseconds

Input Power Required 115/230 VAC, 44-66 Hz,

300 watts maximum

Dimensions 16.75" x 5.25" x 13.25"

(43 cm x 13 cm x 34 cm)

Weight 24 lbs (11 kg) Net

29 lbs (13 kg) Shipping

Color Mint Grey/Olive Grey

OPTIONS

- 01 Remote Control (Digital)
- 05 Hands Off Operation
- 06 Rear Panel Lockout Cover
- 08 Switch Selected Failure Points
- 09 Low Current
- 10 Audible Testing Tone
- 15 Rack Mounting
- 19 Remote Control (Analog & Digital)
- 20 Ohms Sense
- 23 Digital Panel Meters
- 24 Blank Front Panel (Receptacle and/or Start)
- 29 Two Switch-Selectable Voltage Scales
- 30 Six Switch Selectable Test Parameters





