



# Hipot Function Tester

## HTT-1R

❖ Function checker for dielectric withstand/ground continuity.



\*Actual products may vary depending on options and configuration.

The HTT-1R provides a fast, safe and reliable way to verify proper operation of Dielectric Withstand (hipot) and Ground Continuity/Ground Bond Testers between calibration cycles, in accordance with requirements of TUV and other European agencies. It uses actual loads to simulate barely passing and barely failing results to exercise the tester(s), and is designed to be used as a verification test fixture in compliance with the requirements for shift-by-shift verification.

### ➤ Features

- Quickly, safely, and easily proves function of any hipot and/or ground continuity tester using actual loads for ground bond/continuity and leakage current for each PASS and FAIL test.
- Provide compliance to CIG-023 requirements using several standard configurations. Custom configuration available.
- Verifies operation of your test equipment before each shift or before testing of large production runs, ensuring quality and safety tests are being conducted.
- Simulates ground continuity passing condition with  $0.025\Omega$  load, failing condition with  $0.1\Omega$  load. Circuits rated up to 30A.
- Simulates leakage current passing condition of half the setpoint value to ensure the hipot tester is providing both voltage and current.
- Various leakage current trip levels are available from stock, custom configuration available.
- Internal resistance values are marked in the HTT-1R for agency verification.
- Arc test Pass is simulated by open circuit, Fail Arc test above 750Vac, Arc is visible through a small window in the HTT-1R.
- Ergonomically designed for safety, speed and efficiency.
- Small footprint and light weight.
- Durable and compact.



## ➤ Specifications

### GROUND BOND

Ground Bond Test PASS Setting:	0.025Ω. *
Ground Bond Test Fail Setting:	0.1Ω *
Ground Bond Circuit Rating:	30A
Ground Bond Circuit Duty Cycle:	<10A Continuous, >10A 3s test followed by 10s rest.

### BREAKDOWN

Arc Test PASS Circuit:	Open circuit.
Arc Test FAIL Circuit:	Arc over 750Vac ±400Vac / 1050Vdc ±560Vdc
Arc Circuit Voltage Rating:	3000Vac/4200Vdc max.

### LEAKAGE

Leakage Current: Four standard circuits are available: LomA, MedmA, HimA and ExmA.  
Custom values configuration available, contact us for details.

#### Option LomA

Leakage Current PASS:	4.232MΩ ±5%. Volt. dependent. Example: 0.5mA at 2100Vrms; 0.35mA at 1500Vrms.
Leakage Current FAIL:	2.088MΩ ±5%. Volt. dependent. Example: 1.0mA at 2100Vrms; 0.72mA at 1500Vrms.

#### Option MedmA

Leakage Current PASS:	848kΩ ±5%. Volt. dependent. Example: 2.48mA at 2100Vrms; 1.77mA at 1500Vrms.
Leakage Current FAIL:	424kΩ ±5%. Volt. dependent. Example: 4.95mA at 2100Vrms; 3.53mA at 1500Vrms.

#### Option HimA

Leakage Current PASS:	424kΩ ±5%. Volt. dependent. Example: 4.95mA at 2100Vrms; 3.53mA at 1500Vrms.
Leakage Current FAIL:	200kΩ ±5%. Volt. dependent. Example: 10.5mA at 2100Vrms; 7.50mA at 1500Vrms.

#### Option ExmA

Leakage Current PASS:	220kΩ ±5%. Volt. dependent. Example: 9.54mA at 2100Vrms; 6.82mA at 1500Vrms.
Leakage Current FAIL:	120kΩ ±5%. Volt. dependent. Example: 17.5mA at 2100Vrms; 12.5mA at 1500Vrms.

\*Note: Connection resistance to the ground bond tester can add up to 0.03Ω to the actual test value.

\*\*Note: Vrms values are the values read on the meter of the hipot tester when set to either ac or dc.

## ➤ Environmental

Operating Temperature:	15-40°C.
Relative Humidity Range:	0-90% non-condensing.

## ➤ General

Dimensions:	5.3" Wide x 6.8" High x 2.3" Deep.
Weight:	2 lbs approx.
Product Package:	<ul style="list-style-type: none"> <li>• HTT-1R Tester.</li> <li>• HTT-1R User Manual.</li> <li>• HTT1R-HVL Test Lead and 00-GGLBB Return Lead.</li> <li>• NIST traceable calibration certificate to ANSI Z540.</li> <li>• Calibration Data Copy.</li> </ul>



➤ Images

