

U.S. Patents: 6,744,259, 6,549,385, 6,515,484, 6,054,865, 5,548,501

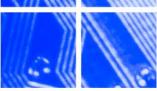




Production Line

Dielectric Withstand Testers













Model 3605

5KV AC Hipot Tester

Model 3665

5KV AC, 6KV DC Hipot Tester

Model 3670

5KV AC, 6KV DC Hipot & Insulation Resistance Tester

Features and Benefits

- Patented SmartGFI® safety circuit protects the operator from shock hazards
- Patented VERI-CHEK® feature prompts users through steps to validate the instrument's operation
- Patented CAL-ALERT® feature alerts the operator that the tester is due for re-calibration
- Built-in adjustable Continuity test for checking basic continuity
- Graphic LCD provides intuitive menu system to simplify the entire testing process from set-up to results
- PLC Remote Control allows operators to remotely control the Hipot tester
- Remote Safety Interlock feature prevents the high-voltage from being activated without the interlock enabled

- 10 Memories with 3 Steps per memory for storing and recalling test parameters
- Electronic Ramp and Dwell timers for more consistent and reliable testing
- Interconnects with an Associated Research Ground Bond tester to form a complete test system
- Digitally controlled arc detection circuit allows the operator to program sensitivity levels for detecting arcs
- Minimum and maximum trip settings for safer and more accurate testing
- Comes complete with an adapter box for products terminated in a line cord





At Associated Research, Safety Compliance Testing Is Our Only Focus.

Input Specifications

Voltage 115/230 VAC ± 10%, user selectable

50/60 Hz ± 5% Frequency

Fuse 3.15 A, fast acting 250 VAC

Dielectric Withstand Test Mode

5000 V @ 20 mA AC **Output Rating** 6000 V @ 7.5 mA DC

Range: 0 - 5.00 KV AC Voltage Setting 0 - 6.00 KV DC

Resolution: 0.01 KV

Accuracy: ± (2% of setting + 5 V)

Maximum Limit Range: 0.00 - 20.00 mA AC

Resolution: 0.01 mA Range: 0 - 7500 µA DC Resolution: 1 µA

Accuracy: AC and DC \pm (2% of setting + 2 counts)

Range: 0.000 - 9.999 mA Minimum Limit AC

Resolution: 0.001 mA DC Range: 0.0 - 999.9 µA Resolution: 0.1 µA

Accuracy: AC and DC \pm (2% of setting + 2 counts)

Arc Detection Range: 0 - 9, 0 disabled

GFI Trip Current: 450 µA max (AC or DC) Ground Fault Interrupt

HV Shut Down Speed: < 1ms

Current Display Auto Range

> AC Range 1: 0.000 - 3.500 mA Range 2: 3.00 - 20.00 mA DC Range 1: 0.0 µA - 350.0 µA Range 2: 0.300 mA - 3.500 mA

Range 2: 3.00 mA - 7.50 mA All Ranges ± (2% of reading + 2 counts)

DC Output Ripple ≤ 5% Ripple RMS at 6 KV DC @ 7.5 mA, Resistive Load

Discharge Time < 200 ms

AC Voltage Waveform

Maximum Limit

Accuracy

The maximum capacitive load vs output voltage: $0.20 \mu F < 1 KV$ $0.050 \mu F < 4 KV$ $0.10 \ \mu F < 2 \ KV$ $0.040 \ \mu F < 5 \ KV$

 $0.06 \ \mu F < 3 \ KV$ $0.015 \mu F < 6 KV$ Sine Wave, Crest Factor = 1.3 - 1.5, <2% THD

Output Frequency Range: 50 or 60 HZ, User Selectable

Output Voltage Regulation ± (1% of output + 5 V) from no load to full load and over

input voltage range.

Dwell Timer Range: AC 0, 0.3 - 999.9 sec (0 = Constant)

DC 0. 0.4 - 999.9 sec (0 = Constant) Accuracy: \pm (0.1% of reading + 0.05 sec)

Ramp Timer Range: Ramp-Up: 0.1 - 999.9 sec

Ramp-Down: AC 0.0 - 999.9 sec DC 1.0 - 999.9 sec (0=OFF)

Accuracy: \pm (0.1% of reading + 0.05 sec)

Ground Continuity Current DC 0.1 A \pm 0.01 A, fixed Range: 0.0 Q - 1.50 Q **Ground Continuity**

Minimum Limit Accuracy: \pm (3% of setting + 0.02 Ω)

Resolution: 0.01Ω

Ground Continuity Range: $0.0 \Omega - 0.50 \Omega$

Auto Offset Resolution: 0.01Ω

Accuracy: \pm (3% of setting + 0.02 Ω)

Insulation Resistance Test Mode

Voltage Setting Range: 30 - 1000 VDC

Accuracy: ± (2% of setting + 5 V)

Range: 1 - 9999 M Ω (4 Digit, Auto Ranging) **Resistance Display** Resolution: 500 VDC - 1000 VDC

MO. $M\Omega$ 0.001 1.000 - 9.999 0.01 10.00 - 99.99 0.1 100.0 - 999.9 1000 - 9999 1

Accuracy: ± (2% of reading +2 counts) at test voltage

500 - 1000 V and 1 - 999.9 M Ω

± (5% of reading +2 counts) at test voltage 500 - 1000 V and 1000 - 9999 $M\Omega$

 \pm (8% of reading +2 counts) at test voltage

30 - 500 V and 1 - 1000 MO

Range: 0, 1 - 9999 MΩ (0=0FF) **Maximum Limit** Accuracy: Same as Resistance Display

Minimum Limit Range: 1 - 9999 MΩ

Accuracy: Same as Resistance Display

Range: Ramp-Up: 0.1 - 999.9 sec **Ramp Timer** Ramp-Down: 1.0 - 999.9 sec (0=0FF)

Accuracy: \pm (0.1% of reading + 0.05 sec) Range: 0, 0.5 - 999.9 sec (0 = Constant) **Delay Timer**

Accuracy: \pm (0.1% of reading + 0.05 sec) **Ground Fault Interrupt**

GFI Trip Current: 450 µA max HV Shut Down Speed: < 1 ms

General Specifications

Remote Control & Signal Output

The following input and output signals are provided through two 9 pin D type connectors:

1. Remote control: Test, Reset, and Remote Interlock 2. Remote recall of memory program #1, #2, and #3 3. Outputs: Pass, Fail, Test-in-process, and Reset

Program Memory 10 Memories, 3 steps per memory.

Security Key Lock capability to avoid unauthorized access to

all test parameters and memory locations. Mechanical Bench or rack mount with tilt up feet.

Dimensions (W x H x D) 8.46 x 3.5 x 14.57 in. (215 x 89 x 370 mm)

Weight 20.96 lbs (9.53 kgs) Calibration

Traceable to National Institute of Standards & Technology (NIST). Calibration controlled by software. Adjustments are made through front panel keypad in a restricted access calibration mode. Calibration

information stored in non-volatile memory.

Available Accessories

Probe (38081)

Return Probe (38082)

Safe-T-Probe (38083) Footswitch (35822)

Retractable probe used on the return side of the Hypot III.

Test Gun with trigger that controls retractable probe and activates the instrument's high voltage circuit.

Interlocked footswitch that provides a "hands-off"

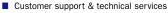
High voltage retractable 5 KV AC probe.

remote start.

Specifications subject to change without notice.







- 5-Year extended warranty*
- 24-Hour turn-around on calibrations
- Industry seminars, expert training & education programs
- Local sales offices throughout the world

































