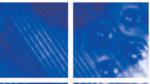
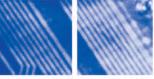




# **Production Line**

# **Dielectric Withstand Testers**















# **Model 3705**

**5KV AC Hipot Tester** 

## **Model 3765**

**5KV AC, 6KV DC Hipot Tester** 

## **Model 3770**

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

## **Features and Benefits**

- RS-232 interface standard for entry-level automation
- 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
- 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
- PLC Remote Control allows operators to remotely control the Hipot tester
- 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  $\pm$  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

Accuracy

 $0.20 \mu F < 1 KV$  $0.050 \mu F < 4 KV$  $0.040 \ \mu F < 5 \ KV$  $0.10 \ \mu F < 2 \ KV$  $0.06 \ \mu F < 3 \ KV$  $0.015 \mu F < 6 KV$ 

The maximum capacitive load vs output voltage:

AC Voltage Waveform Sine Wave. Crest Factor = 1.3 - 1.5 **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** Maximum Limit Resolution:  $0.01 \Omega$ 

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

**Ground Continuity** Range:  $0.0 \Omega - 0.50 \Omega$ Auto Offset Resolution:  $0.01 \Omega$ 

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

#### **Insulation Resistance Test Mode**

**Voltage Setting** Range: 30 - 1000 VDC

Accuracy: ± (2% of setting + 5 V)

Range: 1 - 9999 M $\Omega$  (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 $\Omega$ 

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

± (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 **Ramp Timer** 

Range: Ramp-Up: 0.1 - 999.9 sec 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: ± (0.1% of reading + 0.05 sec)

GFI Trip Current: 450 µA max **Ground Fault Interrupt** HV Shut Down Speed: < 1 ms

### **General Specifications**

Interface

Remote Control &

Signal Output

RS-232 interface standard for entry-level automation. 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)

20.96 lbs (9.53 kgs) Weight

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 (38814)

Footswitch (35822)

High voltage retractable 5 KV AC probe. 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.

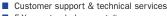
Interlocked footswitch that provides a "hands-off"

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



































