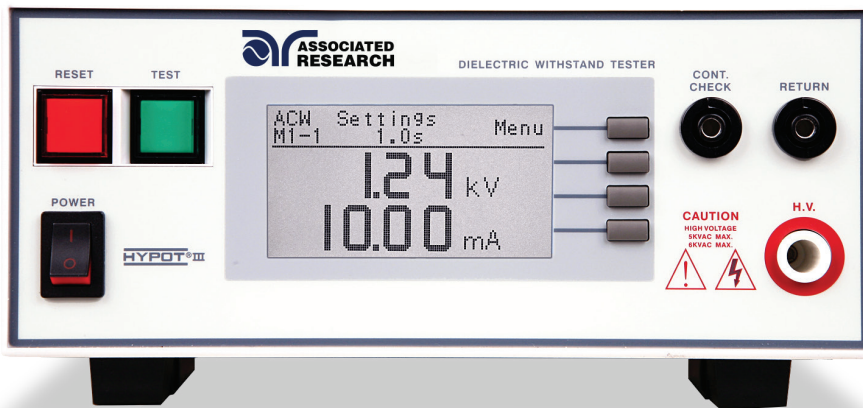


# Hypot<sup>®</sup> III

THE STANDARD FOR PRODUCTION LINE HIPOT TESTING



Hypot<sup>®</sup> III Series includes productivity-enhancing features and proven safety technology to reduce the safety compliance bottleneck on the production line. All models include basic Continuity test capability for compliance with international standards. Interconnect the Hypot<sup>®</sup> III with a HYAMP<sup>®</sup> III Ground Bond instrument to form a complete safety compliance test system.



## AVAILABLE INTERFACES



RS-232

## SAFETY & PRODUCTIVITY FEATURES



**Smart GFI<sup>®</sup>**  
Automatic operator shock protection



**Remote Safety Interlock**  
Easily disable HV output



**PLC Remote**  
Basic PLC relay control



**VeriCHEK<sup>®</sup>**  
Includes preset verification tests



**Cal-Alert<sup>®</sup>**  
Tracks and alerts for calibration



**Interconnection**  
Interconnect with HYAMP<sup>®</sup> III to form a complete test system



**Accredited Cal**  
Accredited calibration options available

## Find the Right Model that Fits Your Testing Needs



AC Hipot



DC Hipot



Ground Continuity



Insulation Resistance

Model	AC Hipot	DC Hipot	Ground Continuity	Insulation Resistance
3705	•		•	
3765	•	•	•	
3770	•	•	•	•
3780*	500 VA		•	

\*Meets 200 mA short circuit requirements

## INPUT SPECIFICATIONS

Voltage 3705/3765/3770 3780	115/230 VAC ± 10%, user selectable 115/230 VAC ± 15%, automatically selected
Frequency	50/60 Hz ± 5%
Fuse 3705/3765/3770 3780	3.15 A, fast acting 250 VAC 15 Amp, Slow Blow 250 VAC

## DIELECTRIC WITHSTAND TEST MODE

Output Rating 3705/3765/3770 3780	5000 V @ 20 mAAC 6000 V @ 7.5 mADC 5000 V @ 100 mAAC
Maximum Limit 3705/3765/3770 3780	AC Range: 0.00 - 20.00 mA Resolution: 0.01 mA DC Range: 0 - 7500 $\mu$ A Resolution: 1 $\mu$ A Accuracy: AC and DC ± (2% of setting + 2 counts)
Minimum Limit 3705/3765/3770 3780	AC Range: 0.000 - 9.999 mA Resolution: 0.001 mA DC Range: 0.0 - 999.9 $\mu$ A Resolution: 0.1 $\mu$ A Accuracy: AC and DC ± (2% of setting + 2 counts)
Arc Detection	Range: 0 - 9, 0 disabled
Ground Fault Interrupt	GFI Trip Current: 450 $\mu$ A max (AC or DC) HV Shut Down Speed: < 1ms
Current Display 3705/3765/3770 3780	Auto Range AC Range 1: 0.000 - 3.500 mA Range 2: 3.00 - 20.00 mA DC Range 1: 0.0 $\mu$ A - 350.0 $\mu$ A Range 2: 0.300 mA - 3.500 mA Range 3: 3.00 mA - 7.50 mA Accuracy: All Ranges ± (2% of reading + 2 counts)
DC Output Ripple	≤ 5% Ripple rms at 6 kVDC @ 7.5 mA, Resistive Load
Discharge Time	≤ 200 ms 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
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 = Continuous) DC 0, 0.4 - 999.9 sec (0 = Continuous)
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)

## DIELECTRIC WITHSTAND TEST MODE (CONTINUED)

Ground Continuity Current	DC 0.1 A ± 0.01 A, fixed
Ground Continuity Maximum Limit	Range: 0.0 $\Omega$ - 1.50 $\Omega$ Resolution: 0.01 $\Omega$
Minimum Limit	Accuracy: ± (3% of setting + 0.02 $\Omega$ )
Ground Continuity Auto Offset	Range: 0.0 $\Omega$ - 0.50 $\Omega$ Resolution: 0.01 $\Omega$ Accuracy: ± (3% of setting + 0.02 $\Omega$ )
Output Short Circuit Current	3780 > 200 mA

## INSULATION RESISTANCE TEST MODE

Voltage Setting	Range: 30 - 1000 VDC Resolution: 1 V Accuracy: ± (2% of setting + 5 V)
Resistance Display	Range: 1 - 9999 M $\Omega$ (4 Digit, Auto Ranging) Resolution: 500 VDC - 1000 VDC M $\Omega$ M $\Omega$ 0.001    1.000 - 9.999 0.01    10.00 - 99.99 0.1    100.0 - 999.9 1    1000 - 9999 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 M $\Omega$
Maximum Limit	Range: 0, 1 - 9999 M $\Omega$ (0=OFF) Resolution: 1 M $\Omega$ Accuracy: Same as Resistance Display
Minimum Limit	Range: 1 - 9999 M $\Omega$ Resolution: 1 M $\Omega$ Accuracy: Same as Resistance Display
Ramp Timer	Range Ramp-Up: 0.1 - 999.9 sec Ramp-Down: 1.0 - 999.9 sec, (0=OFF) Resolution: 0.1 sec Accuracy: ± (0.1% of reading + 0.05 sec)
Delay Timer	Range: 0, 0.5 - 999.9 sec (0 = Continuous) Resolution: 0.1 sec Accuracy: ± (0.1% of reading + 0.05 sec)
GFI Trip Current	450 $\mu$ A max
HV Shut Down Speed	< 1 ms

## GENERAL SPECIFICATIONS

Mechanical	Bench or rack mount with tilt up feet
Dimensions 3705/3765/3770 (W x H x D) 3780	8.46 x 3.5 x 14.57 in. (215 x 89 x 370 mm) 16.93 x 5.24 x 13.78 in. (430 x 133 x 350 mm)
Weight 3705/3765/3770 3780	20.96 lbs (9.53 kg) 49 lbs (23 kg)
Interface	RS-232 interface standard for entry-level automation
Memory	10 Memories, 3 steps per memory

## Why We Use Counts

Associated Research publishes some specifications using "counts" which allows us to provide a better indication of the instrument's capabilities across measurement ranges. A count refers to the lowest resolution of the display for a given measurement range. For example, if the resolution for voltage is 1V then 2 counts=2V.

Specifications subject to change without notice.