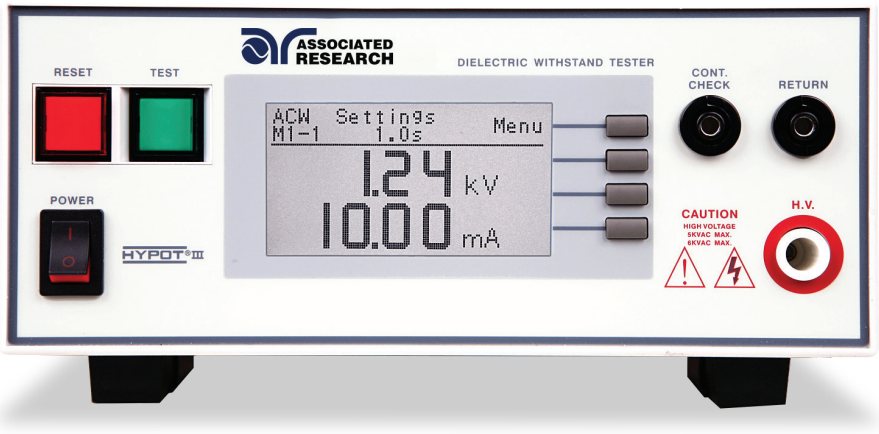
Hypot® III

THE STANDARD FOR PRODUCTION LINE HIPOT TESTING

Hypot® 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® III with a HYAMP® III Ground Bond instrument to form a complete safety compliance test system.



AVAILABLE INTERFACES

RS-232

SAFETY & PRODUCTIVITY FEATURES

Smart GFI®
Automatic operator shock protection

Remote Safety Interlock
Easily disable HV output

PLC Remote
Basic PLC relay control

VeriCHEK®
Includes preset verification tests

Cal-Alert®
Tracks and alerts for calibration

Interconnection
Interconnect with HYAMP® 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
3705	•		•	
3765	•	•	•	
3770	•	•	•	•
3780*	500 VA		•	

*Meets 200 mA short circuit requirements

INPUT SPECIFICATIONS

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

DIELECTRIC WITHSTAND TEST MODE

Output Rating			
3705/3765/3770			5000 V @ 20 mAAC 6000 V @ 7.5 mADC
3780			5000 V @ 100 mAAC
Maximum Limit			
3705/3765/3770	AC	Range:	0.00 - 20.00 mA
		Resolution:	0.01 mA
	DC	Range:	0 - 7500 µA
		Resolution:	1 µA
		Accuracy:	AC and DC ± (2% of setting + 2 counts)
3780	AC	Range:	0.00 – 99.99 mA
		Resolution:	0.01 mA
		Accuracy:	± (2% of setting + 6 counts)
Minimum Limit			
3705/3765/3770	AC	Range:	0.000 - 9.999 mA
		Resolution:	0.001 mA
	DC	Range:	0.0 - 999.9 µA
		Resolution:	0.1 µA
		Accuracy:	AC and DC ± (2% of setting + 2 counts)
3780	AC	Range:	0.000 – 9.999 mA
		Resolution:	0.001 mA
		Accuracy:	± (2% of setting + 6 counts)
Arc Detection		Range:	0 - 9, 0 disabled
Ground Fault Interrupt		GFI Trip Current:	450 µA max (AC or DC)
		HV Shut Down Speed:	< 1ms
Current Display			
3705/3765/3770		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 3:	3.00 mA - 7.50 mA
		Accuracy:	All Ranges ± (2% of reading + 2 counts)
3780		Auto Range	
	AC	Range 1:	0.000 mA – 3.500 mA
		Range 2:	3.00 – 99.99 mA
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 µF < 1 kV 0.050 µF < 4 kV 0.10 µF < 2 kV 0.040 µF < 5 kV 0.06 µF < 3 kV 0.015 µF < 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 Minimum Limit	Range:	0.0 Ω - 1.50 Ω
	Resolution:	0.01 Ω
	Accuracy:	± (3% of setting + 0.02 Ω)
Ground Continuity Auto Offset	Range:	0.0 Ω - 0.50 Ω
	Resolution:	0.01 Ω
	Accuracy:	± (3% of setting + 0.02 Ω)
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 MΩ (4 Digit, Auto Ranging)
	Resolution:	500 VDC - 1000 VDC MΩ MΩ 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 MΩ ± (5% of reading + 2 counts) at test voltage 500 - 1000 V and 1000 - 9999 MΩ ± (8% of reading + 2 counts) at test voltage 30 - 500 V and 1 - 1000 MΩ
Maximum Limit	Range:	0, 1 - 9999 MΩ (0=OFF)
	Resolution:	1 MΩ
	Accuracy:	Same as Resistance Display
Minimum Limit	Range:	1 - 9999 MΩ
	Resolution:	1 MΩ
	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 µA 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)	8.46 x 3.5 x 14.57 in. (215 x 89 x 370 mm)
3780	16.93 x 5.24 x 13.78 in. (430 x 133 x 350 mm)
Weight	
3705/3765/3770	20.96 lbs (9.53 kg)
3780	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.