

Hypot® III

THE STANDARD FOR
PRODUCTION LINE
HIPOT TESTING

SCAN FOR
QUICK
START VIDEO



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



SmartGFI®

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

	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 \pm 10%, user selectable 115/230 VAC \pm 15%, automatically selected 50/60 Hz \pm 5%
Frequency	

Fuse 3705/3765/3770 3780	3.15 A, fast acting 250 VAC 15 Amp, Slow Blow 250 VAC
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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	AC Range: 0.00 - 20.00 mA Resolution: 0.01 mA DC Range: 0 - 7500 μ A Resolution: 1 μ A Accuracy: AC and DC \pm (2% of setting + 2 counts)
3780	AC Range: 0.00 - 99.99 mA Resolution: 0.01 mA Accuracy: \pm (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 μ A Resolution: 0.1 μ A Accuracy: AC and DC \pm (2% of setting + 2 counts)
3780	AC Range: 0.000 - 9.999 mA Resolution: 0.001 mA Accuracy: \pm (2% of setting + 6 counts)
Arc Detection	Range: 0 - 9, 0 disabled
Ground Fault Interrupt	GFI Trip Current: 450 μ A 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 μ A - 350.0 μ A Range 2: 0.300 mA - 3.500 mA Range 3: 3.00 mA - 7.50 mA All Ranges Accuracy: \pm (2% of reading + 2 counts)
3780	AC Auto Range Range 1: 0.000 mA - 3.500 mA Range 2: 3.00 - 99.99 mA
DC Output Ripple	\leq 5% Ripple rms at 6 kVDC @ 7.5 mA, Resistive Load
Discharge Time	\leq 200 ms The maximum capacitive load vs output voltage: 0.20 μ F < 1 kV 0.050 μ F < 4 kV 0.10 μ F < 2 kV 0.040 μ F < 5 kV 0.06 μ F < 3 kV 0.015 μ 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	\pm (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 \pm 0.01 A, fixed
Ground Continuity	Range: 0.0 Ω - 1.50 Ω
Maximum Limit	Resolution: 0.01 Ω
Minimum Limit	Accuracy: \pm (3% of setting + 0.02 Ω)
Ground Continuity	Range: 0.0 Ω - 0.50 Ω
Auto Offset	Resolution: 0.01 Ω
	Accuracy: \pm (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: \pm (2% of setting + 5 V)
Resistance Display	Range: 1 - 9999 M Ω (4 Digit, Auto Ranging) Resolution: 500 VDC - 1000 VDC M Ω M Ω 0.001 1.000 - 9.999 0.01 10.00 - 99.99 0.1 100.0 - 999.9 1 1000 - 9999
	Accuracy: \pm (2% of reading + 2 counts) at test voltage 500 - 1000 V and 1 - 999.9 M Ω \pm (5% of reading + 2 counts) at test voltage 500 - 1000 V and 1000 - 9999 M Ω \pm (8% of reading + 2 counts) at test voltage 30 - 500 V and 1 - 1000 M Ω
Maximum Limit	Range: 0, 1 - 9999 M Ω (0=OFF) Resolution: 1 M Ω Accuracy: Same as Resistance Display
Minimum Limit	Range: 1 - 9999 M Ω Resolution: 1 M Ω 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: \pm (0.1% of reading + 0.05 sec)
Delay Timer	Range: 0, 0.5 - 999.9 sec (0 = Continuous) Resolution: 0.1 sec Accuracy: \pm (0.1% of reading + 0.05 sec)
GFI Trip Current	450 μ 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) 8.46 x 3.5 x 14.57 in. (215 x 89 x 370 mm)
3780	(W x H x D) 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 tester'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.