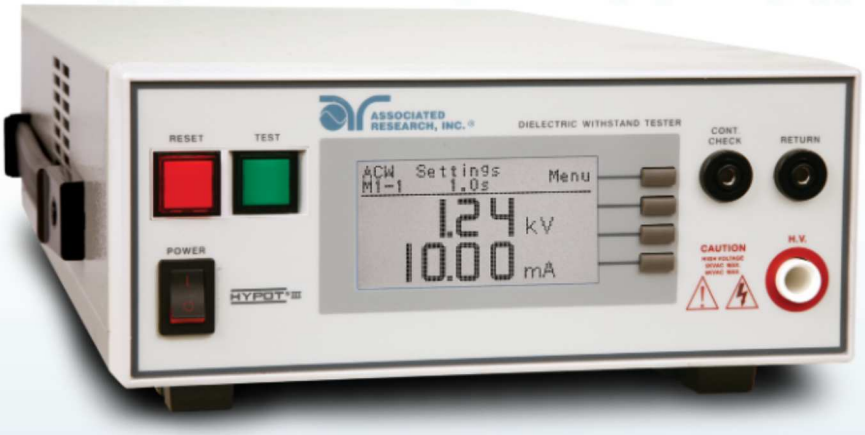
HYPOT® III

The production line Hipot instrument that sets the standard.



Safety agency listed.

Choose from the following at no charge:

RS-232

Our Hypot III series of manual Hipot instruments sets the standard for production line safety compliance testing. We've packed these instruments with 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 as well as advanced functions like our patented SmartGFI operator safety circuit and PLC I/O. Interconnect the Hypot III with a HYAMP III Ground Bond instrument to form a complete safety compliance test system. Interested in automation and data collection? The Hypot III series is now available with a standard RS-232 interface.

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

* meets 200 mA short circuit requirements

Productivity-enhancing Features

- **PLC Remote** — Basic PLC relay control
- **VERI-CHEK®** — Includes preset verification tests
- **CAL-ALERT®** — Tracks and alerts for calibration
- **Inter-Connection** — Interface with a HYAMP III to form a complete safety compliance test system
- **Accredited Cal** — Accredited calibration options available

safety Features

- **Smart GFI®** — Automatic operator shock protection
- **Remote Safety Interlock** — Easily disable HV output

Request a Live Web Demo

standard 2-year warranty on all new instruments

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:	< 1 ms

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	Range:	0.0 Ω - 1.50 Ω
Maximum Limit	Resolution:	0.01 Ω
Minimum Limit	Accuracy:	± (3% of setting + 0.02 Ω)
Ground Continuity	Range:	0.0 Ω - 0.50 Ω
Auto Offset	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	W x H x D) 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

Specifications subject to change without notice.

For more information on testing to a specific standard, refer back to the Common Safety Standard Reference Chart.