HYPOTPLUS®

AC and AC/DC Models

UL® Listed

The HYPOTPLUS® dielectric withstand and ground continuity test system marks a revolution in digital testing technology. . . top quality equipment at an affordable price! Now you can quickly, easily and safely perform any hipot test required by UL, CSA, VDE, IEC, TÜV and other agencies.

For over fifty years, ASSOCIATED RESEARCH has been a leader in the industry, providing equipment and services to meet a wide range of testing applications. Our instruments reflect a total commitment to customer needs and operator safety.

With the introduction of the HYPOTPLUS line, decades of experience and substantial savings are passed along to our customers. Sophisticated yet simple the HYPOTPLUS is designed to test the electronic products of today. . .and tomorrow.

Features/Benefits

■ Solid State Electronic Voltage Control
Provides smooth voltage control without the use of typical variable transformers which induce noise and spikes into the output test voltage.

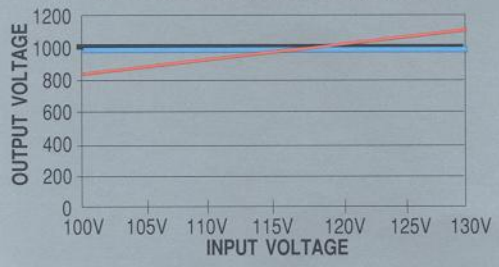
■ Electronic Ramping
Electronically generates a linear voltage rate of rise while maintaining a stable sinewave output.

■ Posi-Test™ Current Sensing System
Ensures the item under test is properly connected and voltage is correctly applied.

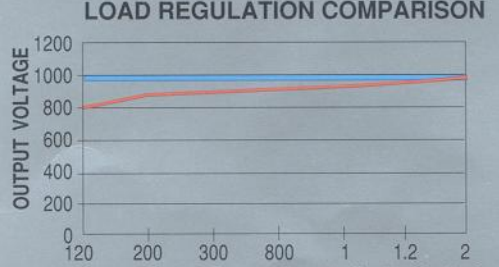
Shown: Component testing using the ARI Model SP02 Safe-T Probe®.

■ Electronic Line & Load Regulation
Maintains output voltage at a steady level even when input voltage or load varies.

LINE REGULATION COMPARISON



LOAD REGULATION COMPARISON



■ Complete Remote Input/Output
Allows easy connection into any type of automated test system. The standard 25-Pin connector provides inputs for Test, Reset and Voltage Control. Outputs feature Test in Process, Pass, Meter Readings, High Current Fail, Low Current Fail, Arc Failure and Continuity Failure.

■ Computer Test Program Compatibility
Fully compatible with LAB Windows® and other PC based instrument control programs.

■ Monitor Panel
Provides visual indication of test status such as voltage ramping, dwell, pass and ready for next test. Each type of test item failure is indicated by a separate front panel light.

■ High Voltage Indicator Light
Flashes to alert operator that high voltage has been activated.

■ Heavy Duty Color Coded Controls
Are easy to use and designed to withstand years of production line use.

■ Digital Metering
Offers accuracy of 1% for precise monitoring of test parameters.

■ Built-In Dwell Timer Circuit
Assures accurate compliance with timed tests.

■ Sophisticated Arc Detection Circuit
Sensitive enough to monitor even low level arcing.

■ Selectable Input Voltage
Allows quick changes from standard U.S. 115V line voltage operation to 230V line operation for use internationally.

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Backside view showing the 10-Turn Leakage Current Adjustment controls, Input Power, Remote Interface and Safety Ground connector.

Shown above is our 19 inch rack mount kit option to convert the standard bench top cabinet to rack mount. Catalog Number HPP-02.

Shield Option locks Ramp & Dwell timer settings, Continuity and Timer test procedures. Cat. No HPP-01

■ 10-Turn Leakage Adjust Control
Offers multi-turn sensitivity in order to easily set precise current trip levels.

■ Built-In Digital Current Meter
Allows operator to observe actual current leakage readings during testing. Current trip levels can be adjusted and monitored digitally without requiring calculation of resistance levels.

■ Continuity Circuit Test
Verifies that item under test has continuity between the grounding connector and any exposed metal parts. For bond ground testing, see our HYAMP™ 5002D Safety Ground tester with capability from 3 to 30 amperes. Photo back cover.

■ Safety Grounding Circuit
Interconnects all cabinet panels and terminates in a rear panel mounted ground connector.

■ Real Current Test Option
Allows the operator to easily view either Real or Total current, important when AC testing highly capacitive loads. Application of AC test current can cause reactive current which often is much greater than the Real current flowing due to true leakage. A doubling of the true leakage can go undetected unless the two components are separated. Independent failure adjustments allow the hipot to be set to trip at different levels of Real and Total current. A front panel switch clearly indicates which type of current is being metered. The operator can change modes to quickly check either Real or Total current readings. Catalog Number HHP-05.

Real Current System Specifications

Real Current Meter	Full scale 5mA. Accuracy: ±5% of reading, ±1 Least Significant Digit
Real Current Trip Range	.1 to 5mA

■ Bench Top or Rack Mount
Standard cabinet includes tilt-up front feet for bench top use. For easy installation into test systems, we suggest using the available rack mount kit, Catalog Number HPP-02.

■ Shield Option
The clear plastic shield allows full view of but restricts the operator from varying settings of Output Voltage, Ramp time or Dwell time. Guards against disabling the Continuity Check feature. Catalog Number HPP-01.

Functional Specifications

Models Available:	AC only: **Model 5400DT**	AC & DC: **Model 5450DT**
Input	115VAC, 50/60Hz, Single phase, .1A 230VAC, 50/60Hz, Single phase, .5A User selectable	
Fuse	1.6A, 250V 5 x 20mm, Slow-Blow	
Output Voltage	0-5kVAC, Continuously adjustable.	0-5kVAC & 0-5kVDC
	No transients exceeding 105% of peak value. 1% output regulation over line input range and 120K to 2M load. Automatic Output Shorting in DC mode to safely discharge test item.	
Output Current	0-20mA	0-20mA AC & 0-5mA DC
High Trip Current Range	.25-20mA adjustable with multi-turn potentiometer.	.25-20mA AC; .25-5mA DC adjustable with multi-turn potentiometer.
Low Trip Current Range	.1-10mA adjustable with multi-turn potentiometer.	.1-10mA AC; .1-5mA DC adjustable with multi-turn potentiometer.
Continuity Trip	1.1 Ohm maximum at .1A (HYAMP™ Model 5002D Ground Bond tester available for currents to 30A.)	
Failure Detector	Audible and Visual	
Ramp Timer	0-99 Seconds in 1 second increments	
Dwell Timer	0-99 Seconds in 1 second increments	
Kilovolt Metering	0-19.99 digital. Accuracy ±1% of reading, ±1 Least Significant Digit	
Milliamp Metering	0-19.99 digital. Accuracy ±1% of reading, ±1 Least Significant Digit	
Remote I/O	Inputs: Test, Reset, Select, Set Outputs: Test-in-Process, Pass, High Fail, Low Fail, Arc Fail, Continuity Fail, kV, MA	
Line Cord	Detachable 7 ft. (2.29m) power cable terminated in a three prong grounding plug.	
High Voltage, Return/Continuity Terminations	High voltage three prong isolated grounding type receptacle. Allows device under test to be plugged directly into the dielectric withstand tester. Also equipped with removable 5 foot (1.52m) high voltage Return/Continuity leads.	
Size	17W x 7.5H x 14.5D inches (431.8W x 190.5H x 368.3Dmm)	
Weight	23 pounds (10.43Kg)	

Product	Description	Catalog No.
Accessories		
Safe-T-Probe®	Allows operator to safely apply high voltage to product under test	SP02
Footswitch	Allows operator to test without touching tester	35822
Adjustable Resistor Bank	12 settings, 120k to 2,148k ohms. Helps verify regulation.	36956
Calibration Kit	120k ohm resistor for adjusting trip point.	35534
Options		
Shield Kit	Restricts operator from altering settings	HPP-01
Rack Mount Kit	Converts bench top cabinet to rack mount.	HPP-02
Meter Memory	Holds kV and mA after failure indication.	HPP-03
10-Turn Locking VC	Provides locking and multi-turn voltage control.	HPP-04
Real Current System	True leakage current when AC testing capacitive loads.	HPP-05
Rear Output Connections	Rear panel HV and Return connections for systems builders.	HPP-06