Hypot®

Production Line Hipot Testing at its Finest

Our new Hypot® Series raises the bar for production line Hipot testing. Improve traceability with on-board data storage and easily transfer test result data and test settings via convenient front panel USB. Automate your production line with the direct barcode connection to quickly associate products with pre-programmed test files. We've included advanced features like improved security and a touch screen interface that provides custom pop-up prompts displayed before each test step. We've dramatically reduced the weight and footprint of the Hypot® Series to make safety compliance a less strenuous ordeal. Quickly interconnect with the HYAMP® Series to form a complete safety compliance system.

EN 50191
COMPLIANT

Find the Model that Fits Your Testing Needs

		AC Hipot	DC Hipot	Ground Continuity	Insulation Resistance
NEW 2017	3805	•		•	
NEW 2017	3865	•	•	•	
NEW 2017	3870	•	•	•	•
NEW 2017	3880*	500 VA*		•	

*Meets 200 mA short circuit requirements

AVAILABLE INTERFACES

USB

SAFETY & PRODUCTIVITY FEATURES

SmartGFI®
Automatic operator shock protection

Remote Safety Interlock
Easily disable HV output

Data Transfer
Easily import/ export test files and data via USB

Barcode Capability
Direct barcode connection

Multiple Languages
Multi-Language user interface

PLC Remote
Basic PLC relay control

Prompt & Hold
Provides alerts & instructions between tests

Advanced User Security
Customize ID & password protection

Interconnection
Interconnect with HYAMP® to form a complete test system

Ramp-HI®
Reduce ramp time during DC Hipot

Charge-LO®
Confirms proper DUT connection

FailCHEK™
Confirms failure detection

Accredited Cal
Accredited calibration options available

My Menu
Customize your own shortcut menu

INPUT SPECIFICATIONS

Voltage	100 – 120 VAC / 200 – 240 VAC ± 10% Auto Range
Frequency	50/60 Hz ± 5%
Fuse	3.15 A, Fast Blow 250 VAC 15 A, Fast Blow 250 VAC (3880 only)

DIELECTRIC WITHSTAND TEST MODE

Output Rating	3805/3865/3870			5 kVA @ 20 mAAC 6 kVA @ 7.5 mADC (3865/3870 only)
	3880			5 kVA @ 100mAAC
Maximum Limit	3805/3865/3870	AC	Range: Resolution:	0.00 – 20.00 mA 0.01 mA
		DC	Range: Resolution: Accuracy:	0 – 7500 µA 1 µA AC and DC ± (2% of setting + 2 counts)
	3880	AC	Range: Resolution: Accuracy:	0.00 – 99.99 mA 0.01 mA ± (2% of setting + 6 counts)
Minimum Limit	3805/3865/3870	AC	Range: Resolution:	0.000 – 9.999 mA 0.001 mA
		DC	Range: Resolution: Accuracy:	0.0 – 999.9 µA 0.1µA AC and DC ± (2% of setting + 2 counts)
	3880	AC	Range: Resolution: Accuracy:	0.000 – 9.999 mA 0.001 mA ± (2% of setting + 6 counts)
Arc Detection	Range:			1-9, ON/OFF Select
Ground Fault Interrupt	GFI Trip Current: 450 µA max (AC or DC), Fixed			
	HV Shut Down Speed: < 1 msec			
Current Display	3805/3865/3870	AC	Range 1: Range 2:	0.000 – 4.000 mA 3.50 – 20.00 mA
		DC	Range 1: Range 2: Range 3:	0.0 µA – 400.0 µA 0.350 mA – 4.000 mA 3.50 mA – 7.50 mA
			Accuracy:	All Ranges ± (2% of reading + 2 counts)
	3880	AC	Range 1: Accuracy: Range 2: Accuracy:	0.000 – 4.000 mA ± (2% of reading + 2 counts) 3.50 – 99.99 mA ± (2% of reading + 6 counts)
DC Output Ripple	≤ 5% Ripple rms at 6 kVDC @ 7.5 mA Resistive Load			
RAMP-HI Selectable	Range: 0.0 – 7,500 µA, User Selectable			
Charge-LO	0 – 350 µA DC or Auto Set			
Discharge Time	< 50 msec for no load, < 100 msec for capacitive load **The maximum capacitive load vs. output voltage:** 1µF < 1KV 0.08µF < 4KV 0.75µF < 2KV 0.04µF < 5KV 0.5µF < 3KV 0.015uF < 6KV			
AC Voltage Waveform/ Frequency	Sine Wave, Crest Factor = 1.3 – 1.5			
	Range:			50 or 60 Hz, User Selectable
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 0, 1.0 – 999.9 sec, (0=OFF)
Ground Continuity Current	DC 0.1A ± 0.01 A, fixed			

DIELECTRIC WITHSTAND TEST MODE CONTINUED

Ground Continuity Maximum Limit Minimum Limit	Range: Resolution: Accuracy:	0.00 – 1.50 Ω 0.01 Ω ± (3% of setting + 0.02 Ω)
Ground Continuity Auto Offset	Range: Resolution: Accuracy:	0.00 – 0.50 Ω 0.01 Ω ± (3% of setting + 0.02 Ω)
Short Circuit Current	> 200 mA (3880 only)	

INSULATION RESISTANCE TEST MODE

Voltage Setting	Range: Resolution: Accuracy:	30 – 1,000 VDC 1 V ± (2% of setting + 5 V)
Resistance Display	Range:	1 – 50,000 MΩ
	Resolution:	

MΩ	30 – 99 VDC MΩ	100 – 499 VDC MΩ	500 – 1000 VDC MΩ
0.001	1.000 – 1.999	1.000 – 1.999	1.000 – 9.999
0.01	2.00 – 19.99	2.00 – 19.99	10.00 – 99.99
0.1	20.0 – 199.9	20.0 – 199.9	100.0 – 999.9
1	200 – 10,000	200 – 20,000	1000 – 50000

	Accuracy:	± (8% of reading+2 counts) at test voltage 30 – 499 V and 1.00–999.9 MΩ
	At test voltage 500-1000 V ± (2% of reading + 2 counts) for 1.00 – 999.9 MΩ ± (5% of reading + 2 counts) for 1000 – 9999 MΩ ± (15% of reading + 2 counts) for 10000 – 50,000 MΩ	
HI & LO-Limit	Range: Resolution:	0, 1.00 – 99.99 MΩ (0=OFF, HI-Limit ONLY) 0.01 MΩ
	Range: Resolution:	100.0 – 999.9 MΩ 0.1 MΩ
	Accuracy:	± (8% of setting + 2 counts) at test voltage 30-499 V ± (2% of setting + 2 counts) at test voltage 500 – 1000 V
Charge-LO	Range:	0.000 – 3.500 µA DC or Auto Set
Ramp Timer	Range:	Ramp-Up: 0.1 – 999.9 sec Ramp-Down: 0, 1.0 – 999.9 sec, (0=OFF)
Delay Timer	Range:	0.5 – 999.9 sec (0=OFF)
Dwell Timer	Range:	0, 0.3 – 999.9 sec (0=OFF)

GENERAL SPECIFICATIONS

Remote Control and Signal I/O	Inputs: Test, Reset, Hardware Interlock, File Recall Outputs: Pass, Fail, Test-in-Process, Reset-Out, Start-Out
Vmax	Displays the maximum voltage value recorded during a breakdown
Imax	Displays the maximum leakage current value read during a test
Memories	50 steps
Interface	USB standard
Language	English, Traditional Chinese, Simplified Chinese, Turkish, Portuguese, Spanish, German, French
Security	Multiple user setups with ID and password
Dimensions (W x H x D)	3805/3865/3870: 8.5" x 3.5" x 11.9" (215 mm x 88.1 mm x 300 mm) 3880: 16.93" x 5.20" x 11.84" (430 mm x 132 mm x 300 mm)
Weight	3805/3865/3870: 12 lbs (5.46 kgs) 3880: 50 lbs (23 kgs)

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 = 2 V.

Specifications subject to change without notice.