

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. Take the guesswork out of 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.



Find the Model that Fits Your Testing Needs



AC Hipot



DC Hipot



Ground Continuity



Insulation Resistance



Model	AC Hipot	DC Hipot	Ground Continuity	Insulation Resistance	EN 50191 Compliant
NEW 2017 3805	•				•
NEW 2017 3865	•	•	•		•
NEW 2017 3870	•	•	•	•	•

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



On Board Data Storage
Save up to 1,500 Test Results on-board

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

DIELECTRIC WITHSTAND TEST MODE

Output Rating	3805/3865/3870	5 kVA @ 20 mAAC 6 kVA @ 7.5 mADC (3865/3870 only)	
Maximum Limit	3805/3865/3870	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)
Minimum Limit	3805/3865/3870	AC	Range: 0.000 – 9.999 mA Resolution: 0.001 mA
		DC	Range: 0.0 – 999.9 µA Resolution: 0.1µA Accuracy: AC and DC ± (2% of setting + 2 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: 0.000 – 4.000 mA Range 2: 3.50 – 20.00 mA
		DC	Range 1: 0.0 µA – 400.0 µA Range 2: 0.350 mA – 4.000 mA Range 3: 3.50 mA – 7.50 mA
		Accuracy:	All Ranges ± (2% of reading + 2 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 0.015µF < 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, 0.2-999.9 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		
Ground Continuity Maximum Limit Minimum Limit	Range:	0.00 – 1.50 Ω	
	Resolution: Accuracy:	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)	

INSULATION RESISTANCE TEST MODE

Voltage Setting	Range:	30 – 1,000 VDC			
	Resolution: Accuracy:	1 V ± (2% of setting + 5 V)			
Resistance Display	Range:	1 – 50,000 MΩ			
	Resolution:	30 – 99 VDC	100 – 499 VDC	500 – 1000 VDC	
	MΩ	MΩ	MΩ	MΩ	
	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:	0, 1.00 – 99.99 MΩ (0=OFF, HI-Limit ONLY)			
	Resolution:	0.01 MΩ 1000-50000 1 MΩ			
	Accuracy:	At test voltage 500-1000 V ± (2% of setting + 2 counts) for 1.00 – 999.9 MΩ ± (5% of setting + 2 counts) for 1000 – 9999 MΩ ± (15% of setting + 2 counts) for 10000 – 50,000 MΩ			
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, 0.5 – 999.9 sec (0=continuous)			

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 1500 test results	
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)
Weight	3805/3865/3870:	12 lbs (5.46 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.