Hypot®

Production Line Hipot Testing at its Finest

CE UKCA RoHS 3 COMPLIANT 2015/863/EU EN 50191 COMPLIANT

Our Hypot® Series raises the bar for production line Hipot testing. Improve traceability with onboard 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	EN 50191 COMPLIANT
3805	•		•		•
3855	•		•	•	•
3865	•	•	•		•
3870	•	•	•	•	•

AVAILABLE INTERFACES

- USB
- RS-232

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
- **WithStand®** Automation Software
- **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	3805/3855/ 3865/3870	5 kVA @ 20 mAAC 6 kVA @ 7.5 mADC (3865/3870 only)		
Maximum Limit	3805/3855/ 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)
Minimum Limit	3805/3855/ 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)
Arc Detection	Range:	1 – 9 (9 is most sensitive)		
Ground Fault Interrupt	GFI Trip Current: 450 µA max (AC or DC), Fixed			
	HV Shut Down Speed: < 1 msec			
Current Display	3805/3855/ 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)
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, 0.2-999.9 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: 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)		

INSULATION RESISTANCE TEST MODE

Voltage Setting	Range: Resolution: Accuracy:	30 – 1,000 VDC 1 V ± (1.5% 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 1000-50000 1 MΩ
	Range: Resolution:	100.0 – 999.9 MΩ 0.1 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)	3805/3855/ 3865/3870	8.5" x 3.5" x 11.9" (215 mm x 88.1 mm x 300 mm)
Weight	3805/3855/ 3865/3870	12 lbs (5.46 kgs)

For reading specifications, please refer to the user manual.

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.