

Hypot®

Production Line Hipot Testing
at its Finest



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: 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 | 3805/3855/ 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 (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: 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 | 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 |
| | MΩ | 1.000 – 1.999 MΩ | 1.000 – 9.999 MΩ |
| | 0.001 | 1.000 – 1.999 | 1.000 – 9.999 |
| | 0.01 | 2.00 – 19.99 | 2.00 – 19.99 |
| | 0.1 | 20.0 – 199.9 | 20.0 – 199.9 |
| | 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 | |
| | Range: | 100.0 – 999.9 MΩ | |
| | Resolution: | 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) |

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.