

# DCS-III Hipot

## DC Dielectric Testing

---

The DCS-III offers hipot testing to detect and log momentary changes in current during a high-voltage test. The test fails when you exceed a programmed current.

---

DC HIPOT test detects momentary (>10 microseconds) breakdowns in the UUT when the current exceeds a programmed limit of 0.5 mA, 1.0mA, 1.5mA, 2.0mA, or 2.5mA. You can test at voltages from 500 to 1500VDC. If a momentary breakdown occurs, the hipot stores the test result (FAIL) and waits until the end of a maximum dwell to terminate the test. This differs from normal insulation testing in that once the programmed current is exceeded for 10 microseconds or more, a failure is logged.

Stimulus	Ranges	Increment	Accuracy
Voltage	500-1500VDC	2V	±5% (open circuit)
Current	0.5mA-2.5mA	.5mA	±10%, 5mA max.

When programming the hipot option, the output terminal has positive polarity in relation to the input terminal, unless you program negative stimulus.

**D,HIP,1000V,1.0MA,.5S,.2T**

Your dwell time should be at least 0.01 seconds and Dwell Time Bypass (DTB) should not be used. The system must reach the desired level of stability before a pass/fail decision is made. Maximum dwell must exceed minimum dwell.

With release 3.200 or greater of T81 and a DCS-III, you can now program simultaneous insulation and hipot test. This will save test time and still assure a quality product. To limit a simultaneous test, you simple include a lower resistance limit, as shown below:

**D,HIP,1000v,1.0MA,>10M,.5S,.2T**

