



Understanding the Failure Indications of SCI Hipot Testers

Your [SCI hipot tester](#) comes equipped with several types of failure detectors capable of indicating different failure conditions. These failure conditions can be used to troubleshoot your test setup and determine if there are any problems with your DUT. Read on to learn more about the various types of failure indications that can occur during hipot testing.

W-High, HI-FAIL, HI-Limit

The W-High, HI-FAIL or Hi-Limit failure indicates that the hipot tester's high limit trip current threshold has been exceeded. This can be caused by three different types of conditions:

- 1.) A short circuit condition. If this condition exists, the screen will also display the abbreviation OFL which stands for "overflow." This condition can be caused by improper test setup or a damaged DUT. Check to make sure that the hipot tester's HV and Return leads are not connected together.
- 2.) The nominal current required by the DUT is greater than the programmed high current limit threshold. If this condition exists, the screen will also display the leakage current reading (uA or mA) at the time of failure. If this failure occurs and the DUT is functioning within specifications you may need to increase the high current limit threshold to avoid more false failures.
- 3.) The DUT is damaged or faulty. If this condition exists, the screen will also display the leakage current reading (uA or mA) at the time of failure. If this failure occurs and the nominal input current required by the DUT is higher than specifications suggest, the DUT could be faulty or damaged.

W-Low, LO-LMT, LO-Limit

The W-Low, LO-LMT or LO-Limit failure indicates that the hipot tester's low limit trip current threshold has not been exceeded. This can be caused by two different types of conditions:

- 1.) An open circuit condition. This condition can be caused by improper test setup or a damaged DUT. Check to make sure that the hipot tester's HV lead is making a good connection with both the hot and neutral conductors of the DUT and the tester's Return lead is making a good connection to the DUT's chassis.
- 2.) The nominal current required by the DUT is less than the programmed low current limit threshold. If this failure occurs and the DUT is functioning within specifications, you may need to decrease the low current limit to avoid false

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failures.

Abort, W-ABRT

The Abort or W-ABRT failure indicates that the hipot tester was aborted by the operator during testing. This is not considered a failure condition because it is triggered by the operator and not the DUT.

Cont., Cont-Fail

The Cont. or Cont-Fail failure indicates that the hipot tester's continuity circuit does not detect a continuous ground path. This condition is caused by an open circuit condition which can be the result of either improper test setup or a faulty ground circuit. Check to make sure the hipot tester's Continuity and Return leads are making a good connection to the DUT's group pin and chassis.

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