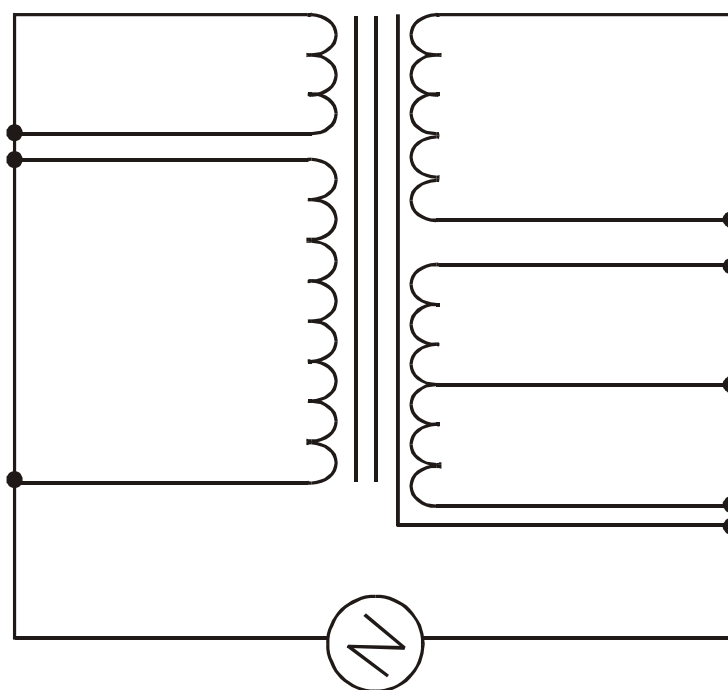


## 1.43. ACRT - AC HI-POT RAMP

### WHERE USED

Hi-Pot Ramp testing (to check for insulation breakdown between windings or between windings and the screen or core) is often specified for power line transformers or for switched mode power transformers in applications where safety is important.

It is typically performed between all primary windings connected together, and all secondary windings plus the screen connected together.



### SPECIFYING THE MEASUREMENT

During the test, an ac target voltage is applied across two groups of windings with the windings in each group being shorted together. The voltage and current are monitored throughout the ramp time.

In programming the AT3600 you may select the voltage (from 100V to 5.5kVrms), the frequency (50Hz / 60Hz at the full voltage, or up to 1kHz at reduced voltage), the current trip level (10 $\mu$ A to 5mApeak), and the ramp up times (1 to 30sec), all to suit the specification of the transformer under test.

The purpose is to check the safety isolation between windings, windings and core, or windings and screens, measuring the voltage at which a user specified current is exceeded, by ramping to a maximum user specified voltage at a user specified frequency.

The operation is to ramp up the test voltage while measuring the voltage across the selected terminals and continually monitor the current to check it is below the test limit.

If target voltage is reached before and the maximum monitored current is met the test has "Passed".

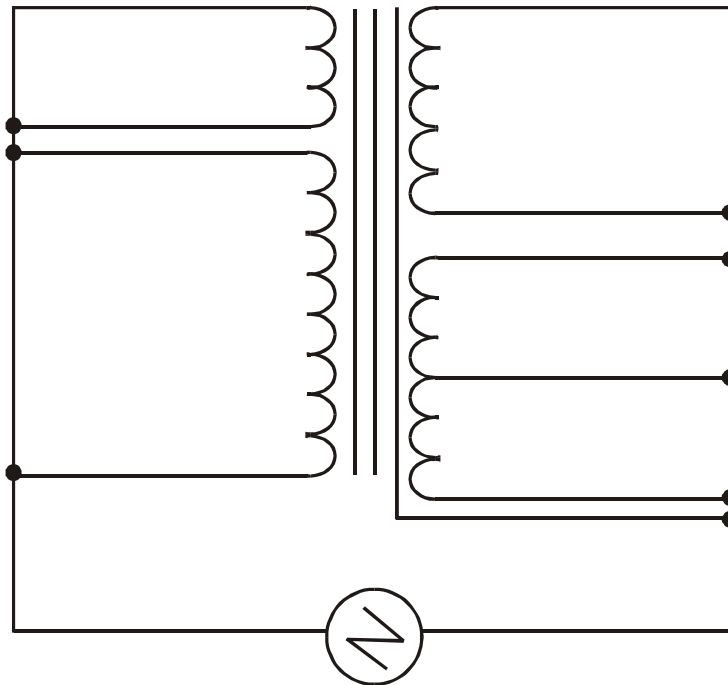
If the maximum monitored current is met before the target voltage is reached the test has "Failed".

## 1.44. DCRT - DC HI-POT RAMP

### WHERE USED

Hi-Pot Ramp testing (to check for insulation breakdown between windings or between windings and the screen or core) is often specified for power line transformers or for switched mode power transformers in applications where safety is important.

It is typically performed between all primary windings connected together, and all secondary windings plus the screen connected together.



### SPECIFYING THE MEASUREMENT

During the test, a dc target voltage is applied across two groups of windings with the windings in each group being shorted together. The voltage and current are monitored throughout the ramp time.

In programming the tester you may select the voltage (from 100V to 7KVdc), the current trip level (1 $\mu$ A to 3mA), and the ramp up times (1 to 2sec), all to suit the specification of the transformer under test.

The purpose is to check the safety isolation between windings, windings and core, or windings and screens, measuring the voltage at which a user specified current is exceeded, by ramping to a maximum user specified voltage at a user specified frequency.

The operation is to ramp up the test voltage while measuring the voltage across the selected terminals and continually monitor the current to check it is below the test limit.

If target voltage is reached before and the maximum monitored current is met the test has "Passed".

If the maximum monitored current is met before the target voltage is reached the test has "Failed".