

# VLF AC hipot test

## General information about VLF AC hipot test AD-VLF-1050

Withstand voltage test is an essential preventive test for electrical equipment. It is divided into two parts: AC and DC withstand voltage test. AC test can be further divided into power frequency, variable frequency and 0.1Hz very low frequency test, among which the last one is highly recommended by IEC, due to its remarkable advantages.

Following is a comparison for DC, Power Frequency, Variable Frequency, and 0.1Hz test.

In fact VLF test is the substitute for power frequency test. It is suitable for testing electrical equipment with large capacitance.

### Features:

- Small size and light weight. Big LCD screen and built-in printer.
- 0.1Hz, 0.05Hz and 0.02Hz can be chosen, which ensures a wide test range.
- It realizes the fully automatic voltage boost, step-down, measurement and protection as well as the manual intervention in the process of automatic voltage boost.
- Overvoltage protection and over-current protection. Action time is no longer than 20ms.
- Data of current, voltage, wave form can be directly sampled at high voltage side, so the data is real and accurate.
- A high voltage output protective resistor is provided in the voltage boost body in the design and this eliminates the need of additional protective resistor connected outside.
- Closed-loop negative feedback circuit is adopted. No capacity rising during outputting.



## Technical specification of the device:

- Peak voltage: 50kV
- Test frequency: 0.1Hz, 0.05Hz and 0.02 Hz (selectable)
- Fuse: 10A
- Maximum load capacity: 0.5 $\mu$ F, 0.1Hz; 1 $\mu$ F, 0.05Hz; 2.5 $\mu$ F, 0.02Hz
- Power supply: 220V  $\pm$ 10%, 50Hz  $\pm$ 5% (If using a portable generator, make sure the output voltage and frequency are stable. Power >3kW.)
- Output voltage accuracy: peak voltage instability  $\leq$ 1%; frequency instability  $\leq$ 3%; waveform distortion: <5%.
- Working environment: indoor or outdoor; -10 $^{\circ}$ C-+40 $^{\circ}$ C; 85%RH
- Weight: Control unit - 4kg; HV unit I: 50kg.

Aspects	DC	Power Frequency	Variable Frequency	0.1Hz
Equivalency	poor	good	good	good
Insulation Damage	strong	slight	slight	slight
Operation Safety	relatively low	relatively low	relatively low	high
Wiring Difficulty	complicated	complicated	most complicated	simple
Volume	smallest	largest	large	small

