
50kV VLF AC Hipot Test Set

Model #: VLF-50

50kV VLF AC Hipot Test Set VLF-50 can output a maximum of 50kV AC voltage at 0.1Hz, 0.05Hz, 0.02Hz or 0.01Hz, which is designed for AC withstand testing of 25kV power cables according to the standard IEEE 400.2-2013, IEEE 400.2-2024, IEC 60502-2 and DL/T 849.4-2024.

Descriptions

VLF stands for Very Low Frequency. VLF Hipot Test Set is an AC output high voltage instrument. VLF AC Hipot Test Set provides sinusoidal AC voltage but at 0.1Hz-0.01Hz, compared to the 50/60 Hz output of conventional AC test set. It is still an AC voltage with sinusoidal polarity reversals every half cycle.

50kV VLF AC Hipot Test Set VLF-50 is designed for AC withstand testing of 25kV power cables according to the standard IEEE 400.2-2013, IEEE 400.2-2024 and IEC 60502-2. With output frequency options of 0.1Hz, 0.05Hz, 0.02Hz and 0.01Hz, the

VLF-50 can test power cable making it the right choice for the long cable spans like feeders, submarine cables, wind and solar farms.

Main Features

- ◆ Rugged and reliable design
- ◆ 7-inch touch screen for operation and display
- ◆ Perform HV withstand test for cable & motor/generator
- ◆ Maximum output AC voltage 50kV(peak)
- ◆ Output frequency options 0.1Hz, 0.05Hz, 0.02Hz or 0.01Hz
- ◆ High load capacity 5.5μF at 0.01Hz
- ◆ Automatic result interpretation as per IEEE 400.2-2013
- ◆ Easy field operation with no need for external PC

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- ◆ Test results can be saved into test set
 - ◆ Test results can be printed via built-in thermal printer

Technical Data

1)Output

AC Voltage: 0-50kV/30mA(peak)

Frequency: 0.1/0.05/0.02/0.01 Hz sinusoidal

2)Duty Cycle: continuous

3)Load Rating

$\leq 0.5\mu\text{F}@0.1\text{Hz}$

$\leq 1.1\mu\text{F}@0.05\text{Hz}$

$\leq 2.2\mu\text{F}@0.02\text{Hz}$

$\leq 5.5\mu\text{F}@0.01\text{Hz}$

4)Measurement Accuracy: $\pm 3\%$ of reading

5)Voltage Positive and Negative Peak Error: $\leq 3\%$

6)Weight

Controller: 4kg

Booster(HV Tank): 40kg

7)Power Supply: AC220V/AC230V, 50/60Hz or AC120V, 60Hz

8)Environmental Conditions

Operating Temperature: $-10^{\circ}\text{C}\dots+50^{\circ}\text{C}$

Storage Temperature: $-20^{\circ}\text{C}\dots+70^{\circ}\text{C}$

Humidity: $\leq 85\%\text{RH}$