
40kV VLF AC Hipot Test Set

Model #: VLF-40

40kV VLF AC Hipot Test Set VLF-40 is designed for testing power cables at frequency 0.1Hz, 0.05Hz, 0.02Hz or 0.01Hz in accordance with 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.

40kV VLF AC Hipot Test Set VLF-40 is designed for testing power cables in accordance with the standard IEEE 400.2-2013, IEEE 400.2-2024, IEC 60502-2 and DL/T 849.4-2024 with output frequency options of 0.1Hz, 0.05Hz, 0.02Hz and 0.01Hz sine wave voltage of up to 40kV(peak).

The power cables can be tested for dielectric breakdown strength with AC voltage. The test procedure does not damage fault-free insulation.

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 40kV(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
- ◆ Test results can be saved into test set

-
- ◆ Test results can be printed via built-in thermal printer

Technical Data

1)Output

AC Voltage: 0-40kV/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: $\leq 85\%\text{RH}$