
Advanced 45kV VLF Hipot Test System

Model #: VLF-45TD

VLF-45TD is the latest generation of multifunctional VLF hipot test system, which is capable of performing VLF withstand voltage, tan delta and DC test, as well as sheath test with sheath fault location mode in compliance with the standard IEEE 400.2-2013, IEEE 400.2-2024, IEC 60502-2 and IEC 60229.

Descriptions

VLF-45TD is the latest generation of multifunctional VLF hipot test system with maximum AC voltage output 45kV(peak). It is capable of performing VLF and DC testing, as well as sheath testing with sheath fault location mode.

VLF-45TD combines with Tan Delta(TD) diagnostic unit to enable a straightforward condition assessment of the power cable system.

VLF-45TD is a good choice for installation, acceptance and maintenance test of 5kV to 25kV power cable in compliance with the standard IEEE 400.2-2013, IEEE 400.2-2024, IEC 60502-2 and IEC 60229.

Main Features

- 1)VLF sinewave: 0-45 kV AC peak/ 31.8 kV AC RMS
- 2)VLF square wave: 0-45 kV peak
- 3)DC: ± 0 -45kV(proof test, sheath test)
- 4)Output Frequency: 0.1Hz, 0.05Hz, 0.02Hz, 0.01Hz
- 5)Performs VLF withstand test
- 6)Performs Tan Delta test
- 7)Performs DC test
- 8)Performs sheath test and sheath fault location
- 9)Firmware updates via USB
- 10)Record in the internal memory, exportable to a computer via USB stick for generating test reports

Technical Data

- 1)Input: 100-240VAC(1-phase), 50/60Hz
- 2)Output
VLF sinewave: 0-45kV AC peak / 0-31.8kV AC RMS, resolution: ± 0.001 kV, accuracy: $\pm 1\%$
VLF square wave: 0-45kVpeak, resolution: ± 0.001 kV, accuracy: $\pm 1\%$
DC: ± 0 -45kV(proof test, sheath test), resolution: ± 0.001 kV, accuracy: $\pm 1\%$
Current: 0-14mA, resolution: 1 μ A, accuracy: $\pm 1\%$
- 3)Output Frequency: 0.1Hz, 0.05Hz, 0.02Hz, 0.01Hz
- 4) Load Rating

0.5 μ F@0.1Hz@45kVpeak
1.0 μ F@0.05Hz@45kVpeak
5.0 μ F@0.01Hz@45kVpeak
5)Sheath test
Umax: 10kV
Current: 0.1mA-5.0mA
6)Sheath fault location
Umax: 10kV
Pulse / Period: 1:3 / 4s, 1:5 / 4s, 1:5 / 6s, 1:9 / 6s
7)Tan Delta(TD) Test
Frequency: 0.1Hz, 0.05Hz, 0.02Hz, 0.01Hz
Load range: 5nF-10 μ F
TD Range: 0.01... 999.99 x 10⁻³
Accuracy: 1.0 x 10⁻⁴
Resolution: 1.0 x 10⁻⁵
8)Capacitance Measurement
Range:0-18.0 μ F
Accuracy: typ. 20%
9)Resistance Measurement
Range: 0.1G Ω -20G Ω
Accuracy: typ. 10%
10)Memory: internal 128 test records
11)Interface: USB
12)Dimensions(L x W x H): 510mm x 310mm x 480mm
13)Weight: 23kg
14)Environmental Conditions
Operating Temperature: -10°C...+50°C
Storage Temperature: -20°C...+70°C
Humidity: $\leq$ 90%RH