

### **HVI - The World's Source for High Voltage Test Equipment**

Advanced test equipment for high voltage proof and preventive maintenance testing of electrical apparatus hvinc.com

# VLF TESTING HIGH VOLTAGE CABLES?

# **HVI Offers 3 VLF Models for Testing High Voltage Loads**

0 - 120 kVac

0 - 140 kVac

0 - 200 kVac

VLF Series models, first offered in 1997, are rugged, reliable, economical, and designed for field testing MV & HV cables. The three models described here can test high voltage cables rated up to ~ 150 kVac, depending on the tests performed. Many other models in the VLF Series and the VLF E Series are available with voltage ratings from 30 kVac – 90 kVac, for testing medium voltage cable.

The load capacitance ratings and voltage outputs of the three models are shown below and the cable voltage ratings that can be tested, per standards, for each model. All models can perform offline IEEE specified Withstand, Tan Delta, and Partial Discharge testing. Accessory TD and PD measurement instruments are available from several vendors or can be provided by HVI.

## **Three HV Cable Testing Models**

VLF-120CMF 0 - 120 kVac peak

0 - 140 kVac peak

VLF-200CMF 0 - 200 kVac peak 0.55 μF @ 0.10 Hz. – 5.50 μF @ 0.01 Hz.

1.50  $\mu$ F @ 0.10 Hz. – 7.50  $\mu$ F @ 0.01 Hz.

 $0.75 \mu F @ 0.10 Hz. - 3.75 \mu F @ 0.02 Hz.$ 

### **Testing per IEEE 400 Standards**

#### VLF-120CMF can:

VLF-140CMF

Withstand test cables rated ≤ 69 kV (per 400.2) Tan Delta test cables rated ≤ 98 kV (1.5 Uo)

Partial Discharge test cables rated ≤ 73 kV (2 Uo)

#### VLF-140CMF can:

Withstand test cables rated ≤ 80 kV (per 400.2)

Tan Delta test cables rated ≤114 kV (1.5 Uo) Partial Discharge test cables rated ≤ 86kV (2 Uo)

### VLF-200CMF can:

Withstand test cables rated ≤ 120 kV (per 400.2) Tan Delta test cables rated ≤ 163 kV (1.5 Uo) Partial Discharge test cables rated ≤ 122 kV (2 Uo)



Includes VLF-200CMF 10 kW Generator, Noise Filter, TD & PD Measurement Divider. & TD & PD measurement & reporting Instrumentation.









## **MODEL SIZE & WEIGHTS and LOAD RATINGS**

#### VLF-120CMF



Control Cabinet: 17' w x 11' d x 9.5' h (43 x 28 x 24 cm) 20 lbs. (9kg) Regulator Section: 20" w x 14" d x 27" h (51 x 36 x 69 cm) 160 lbs. (73kg) HV Tank Section: 26" w x 26" d x 22 "h (66 x 66 x 56 cm) 390 lbs. (177kg)

All mounted on aluminum trolley: 855 lbs. (388 kg) including 100'/30m HV Output & Ground cable reels

Load Rating:  $0.55 \mu F @ 0.1 Hz$ ,  $1.1 \mu F @ .05 Hz$ ,  $2.2 \mu F @ .02 Hz , 5.5 \mu F @ .01 Hz$ Minimum capacitance for full load

output =  $0.01 \mu F$ 



### VLF-140CMF



Controller/Regulator: 23" w x 30" d x 62" h (61 x 76 x 157 cm) 750 lbs. (340kg) HV Tank Section: 61" w x 37" d x 61" h (150 x 94 x 221 cm) 2555 lbs. (1160kg) HV Output: Oil Filled Porcelain Bushing @ 250kV BIL Rating

Load rating: 1.5μF @ 0.1 Hz, 3.0μF @ .05 Hz, 7.5 μf @ .02 Hz

Minimum capacitance to achieve full output = 0.01 μF

Most powerful 140 kV VLF worldwide

#### VLF-200CMF



Control/Regulator: 23"w x 30"d x 62" high (61 x 76 x 157 cm) 750 lbs. (340kg) HV Tank Section: 59"w x 37"d x 87" high (150 x 94 x 221 cm) 3300 lbs. (1497kg)

Load Rating:  $\bigcirc$  0.75  $\mu$ F @ 0.1 Hz, 1.5  $\mu$ F @.05Hz, 3.75  $\mu$ f @ .02 Hz

Minimum capacitance to achieve full output = 0.01 μF

Most powerful 200 kV VLF worldwide





VLF-30CM, VLF-4022CMF, VLF-50CMF, VLF-6022CMF, VLF-65CMF, VLF-90CMF, VLF Series Models:

VLF-12011CMF, VLF-140CMF, VLF-200CMF, VT33 VLF/THUMPER

VLF-E Series Models: VLF-34E, VLF-65E Tan Delta: TD-65E E-Link Software







