



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 volt- age 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

0.55 μF @ 0.10 Hz. – 5.50 μF @ 0.01 Hz.

VLF-140CMF 0 - 140 kVac peak

1.50 μF @ 0.10 Hz. – 7.50 μF @ 0.01 Hz.

VLF-200CMF 0 - 200 kVac peak

0.75 μF @ 0.10 Hz. – 3.75 μF @ 0.02 Hz.

Testing per IEEE 400 Standards

VLF-120CMF can:

Withstand test cables rated ≤ **69 kV** (per 400.2)

Tan Delta test cables rated ≤ **98 kV** (1.5 U₀)

Partial Discharge test cables rated ≤ **73 kV** (2 U₀)

VLF-140CMF can:

Withstand test cables rated ≤ **80 kV** (per 400.2)

Tan Delta test cables rated ≤ **114 kV** (1.5 U₀)

Partial Discharge test cables rated ≤ **86kV** (2 U₀)

VLF-200CMF can:

Withstand test cables rated ≤ **120 kV** (per 400.2)

Tan Delta test cables rated ≤ **163 kV** (1.5 U₀)

Partial Discharge test cables rated ≤ **122 kV** (2 U₀)

VLF-200CMF with TD & PD Measurement



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



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Model Size & Weights & 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 μF @ 0.1 Hz, 1.1 μF @ .05 Hz, 2.2 μF @ .02 Hz , 5.5 μF @ .01 Hz

Minimum capacitance for full load output = 0.01 μF



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: 1.5 μF @ 0.1 Hz, 3.0 μF @ .05 Hz, 7.5 μF @ .02 Hz *

Minimum capacitance to achieve full output = 0.005 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: 0.75 μF @ 0.1 Hz, 1.5 μF @.05Hz, 3.75 μF @ .02 Hz *

Minimum capacitance to achieve full output = 0.01 μF

***Most powerful 200 kV VLF worldwide**



VLF Series Models: VLF-30CM, VLF-4022CMF, VLF-50CMF, VLF-6022CMF, VLF-65CMF, VLF-90CMF, VLF-12011CMF, VLF-140CMF, VLF-200CMF, VT33 VLF/THUMPER

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