



# VLF-50CMF

## Features and Benefits

The High Voltage, Inc. VLF-50CMF is a higher power design for withstand testing of 25kV cable systems per IEEE 400.2-2013. With output frequency options of 0.1Hz, 0.05Hz, 0.02Hz, and 0.01Hz the VLF-50CMF can test up to 50 miles of cable making it the right choice for the long cable spans like feeders, submarine cables, wind and solar farms. When coupled with optional equipment the VLF-50CMF is the voltage source for diagnostic tests such as Tan Delta and Partial Discharge for 25kV class cables. HVI introduced Sinewave output VLF technology in 1997 and the VLF-50CMF has been manufactured since 2001. The VLF-50CMF components are mounted on a push cart for portability but can be configured as individual pieces for vehicle mounting.



Model VLF-50CMF

## Specifications



<b>Input</b>	230 volts, 50/60 Hz, 30 A peak, 25 A average
<b>Output</b>	Sinusoidal, 0-50kVac peak, 0.1/0.05/0.02/0.01 Hz frequency Continuous duty. 100 ft. shielded x-ray output cable with dual cable reels
<b>Load</b>	5.0 $\mu$ F (approx. 5mi. of cable) @ 0.1 Hz 10.0 $\mu$ F (approx. 10mi. of cable) @ 0.05 Hz 25.0 $\mu$ F (approx. 25mi. of cable) @ 0.02 Hz 50.0 $\mu$ F (approx. 50mi. of cable) @ 0.01 Hz
<b>Metering Scales</b>	Voltmeter: 0-50 kVac peak Current Meter: 0-200 mA peak Load capacitance: 0-6 microfarads 1 x 10 ranges
<b>Sizes</b>	Control: 17" w x 11" d x 9.5" h, 432 mm w x 280 mm d x 241 mm h Regulator: 20" w x 14" d x 27" h, 508 mm w x 356 mm d x 686 mm h HV Tank: 12.5" w x 19" d x 23" h, 345 mm w x 483 mm d x 584 mm h Overall: 30" w x 60" d x 51" h, 762mm w x 1524mm d x 1295mm h
<b>Weights</b>	Control: 200 lbs., (9 kg) Regulator: 160 lbs., (73 kg) HV Tank: 310 lbs., (141 kg) Overall: 775 lbs., (352 kg)



Controls are easy and reliable.



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### IEEE 400.2-2013 Test Voltages for Sinusoidal VLF

Cable Rating (phase to phase)	Installation (phase to grd)		Acceptance (phase to grd)		Maintenance (phase to grd)	
	[kV rms]	[kV peak]	[kV rms]	[kV peak]	[kV rms]	[kV peak]
5	9	13	10	14	7	10
8	11	16	13	18	10	14
15	19	27	21	30	16	22
20	24	34	26	37	20	28
25	29	41	32	45	24	34

Test duration should be 30 – 60 minutes at the above voltages.