



VLF Cable testing for cables rated to 35kV

VLF-65E

Features and Benefits

The High Voltage, Inc. VLF-65E is the latest generation of VLF AC hipots using an air-cooled, solid state design with microprocessor control. High end features include user programmable test sequences, wireless communications, data retrieval and manual or automatic load based output frequency selection. The supplied E-Link PC software offers wireless remote operation, custom report generation, and test data export to .csv. Wireless communication between the VLF-65E, optional TD-65E Tan Delta Bridge, and/or user supplied PC is achieved via the XBee protocol which offers more reliability than Bluetooth. Introduced in 2014, the VLF-65E along with the TD-65E is the choice for 5 to 35kV cable acceptance, withstand, and diagnostic testing per IEEE 400.2-2013.

Specifications



Input	100 - 265Vac, 50/60Hz, 20A max
Output	VLF Sinewave: 0 - 65kVPeak (46kVrms), resolution: ±0.1kV VLF Squarewave: 0 - 65kVPeak, resolution: ±0.1kV DC: ±0 - 65kV (Proof Test, Sheath Test), resolution: ±0.1kV
Duty	Continuous
Load Rating	1.0uF @ 0.1Hz @ 65kVp, 10.0uF @ 0.01Hz @ 65kVp, calculated 6.5kVp*uF*Hz uF rating increases at lower voltages, Ex: 1.4uF @ 0.1Hz @ 47kVp
Frequency	0.01 to 0.1Hz in 0.01Hz Increments, auto-frequency detect
Metering	5.7" Color LCD display Voltage (kVp/kVrms): ±1% accuracy, 0.001kV resolution Current (mA _p /mA _{rms}): ±1% accuracy, 0.001mA resolution Calculated: Capacitance, Resistance, Flashover Voltage, and Time to Failure
Fault Response	Fault on Arc and Burn on Arc
Memory	Internal: 50 test records/External (USB Drive): Limited by media capacity
PC Interface	External USB (Firmware Upgrade Only)/XBee 802.15.4 (wireless, ~30ft range)
PC Software	E-Link remote control and report generation software
Cable Lengths	20'/6m flexible x-ray, 20'/6m ground #2, 20'/6m test leads #10, ground hook, line cord
Size	22"/559mm x 15.5"/369mm x 26"/660mm
Weight	150 lb, 68 kg



Model VLF-65E



Intuitive menu driven user interface.

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
28	32	45	36	51	27	38
30	34	48	38	54	29	41
35	39	55	44	62	33	47

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



TD-34E VLF-34E VLF-65E TD-65E