



VLF Test System 80 kV

Test with 3 U₀ for 46 kV cables as Stand alone or as optional integration for the Centix system.

- ▶ High test power without Frequency reduction
- ▶ No polarisation effects as by DC testing
- ▶ Protocolling by Chipcard or Printer
- ▶ Breakdown recognition
- ▶ Leakage current measurement



Functional Description

Powerful 0.1 Hz VLF test system with energy recovery for testing of cables with Cosine Rectangular Wave voltage according to VDE and ICE.

Automatic voltage control to set reference value. The system consists of a control unit and a HV unit.

In accordance with most regulations, cables and joints must be tested after installation or repair. The Seba KMT VLF Test System 80 kV can be used to test cables with operating voltage levels up to 46 kV. The high test capacity of 2,5 µF permits the simultaneous testing of all three phases. Positive and negative DC testing of cables and connected switchgear can be carried out by switching over to DC Mode.

Performance Characteristics:

The 0,1 Hz Cosine Rectangular Wave form voltage ensures that weak spots in the cable are brought to break-down.

The voltage polarity transition is just like that of a 50 Hz sinusoidal wave. Therefore the cable is tested like with a normal 50 Hz AC test.

The advantages of the VLF method with 0.1 Hz Cosine Rectangular Wave Voltage have been proved by extensive scientific research as well as practical field tests. The method is recommended in the VDE, the harmonisation document IEC HD 620 and 621 as well as by the IEEE 400.

This VLF Test System 80 kV can be used as Stand alone system or as a fully integrated part of a test and fault location system.

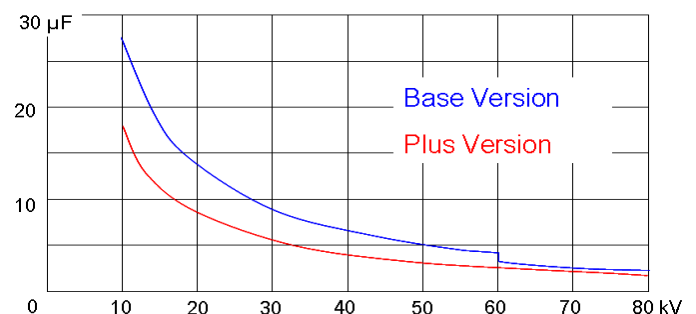
The integrated safety system and breakdown recognition provide maximum safety.

Leakage current measurement provides condition information and the protocolling function permits the storage of the test data for further reporting

Technical Data

0.1 Hz VLF operation	Base	Plus
Output voltage VLF, U _n	0...80 kV	0...80 kV
Output current	0...12.5 mA	10.5 mA @ 80 kV 12.5 mA @ 60 kV
Testable cable capacitance at 80 kV _{rms}	Max. 2.0 µF	2,5 µF
Testable cable capacitance at 78 kV _{rms}	Max. 2.2 µF	2.7 µF (3 x U ₀ for 45 kV cables)
DC Operation		
Output voltage DC -	0 ... -80 kV	0 ... -80 kV
Max pos. output current	12.5 mA	12.5 mA
Output voltage DC+	--	0 ... +80 kV
Max neg.output current	--	12.5 mA
Leakage current	Measurement integrated	
Protocolling	Integrated	
Sheat fault pinpointing	0...10 kV / Duty Cycle 1:3	
Weight	380 kg	
Dimensions	1350 x 1250 x 1100 (1500*) mm	

Testable Capacities



Options:

- Integrated in Printer
- HV cable drums - manual or motor driven
- LV connection cables
- De-humidifier VLF 60/80 kV**

(*depending on position of HV output)

(**for operation in Off Shore and humid environment of essential importance!)