Cable Test Sets

KPG 20kV VLF KPG 36kV VLF



VLF O.1 Hz







Portable VLF cable test sets with 0.1 Hz - technology

The portable cable test sets KPG 20kV VLF and KPG 36kV VLF are used for testing of medium voltage cables with extruded insulation (XLPE-, PE-, EPR-insulation) and nominal voltage up to 6.3/11kV (KPG 20kV VLF) or 12/20kV (KPG 36kV VLF) in accordance to DIN VDE 0276/620 (CENELEC HD 620 S1).

Test is carried out with a low strain practice with very low frequency voltage of 0.1Hz and test voltage level of $3x U_0 r.m.s$. Test enables detection of damages of insulation within shortest test time. The devices are also able to test medium voltage cables with impregnated paper insulation. Cable sheath test with direct voltage is possible as well.

	KPG 20kV VLF	KPG 36kV VLF
Power supply	230 V, 5 A, 50/60 Hz	230 V, 10 A, 50/60 Hz
Output voltage	520 kV _{r.m.s.} , 0.1 Hz VLF (0.05 Hz opt.) ± 030 kV DC	536 kV _{r.m.s.} , O.1 Hz VLF (0.05 Hz opt.) ± 052 kV DC
Voltage waveshapes	VLF similar sine-wave (true R.M.S. measurement), Direct voltage	
max. load (VLF)	3.7 µF at 19 kV _{r.m.s.} , 0.1 Hz (app. 10 km XLPE-cable 11kV/150mm²)	3.7 μF at 19 $kV_{r.m.s.}$, 0.1 Hz 6.7 μF at 19 $kV_{r.m.s.}$, 0.05 Hz
	6.7 µF at 19 kV _{r.m.s.} , 0.05 Hz (app. 18 km XLPE-cable 11kV/150mm²)	2.0 µF at 36 kV _{r.m.s.} , 0.1 Hz (app. 8 km XLPE-cable 20kV/150mm²)
		3.6 µF at 36 kV _{r.m.s.} , 0.05 Hz (app. 15 km XLPE-cable 20kV/150mm²)
Overcurrent trip (DC)	10 mA	
Discharge	integrated automa 6250 J (up to 14 µF at 30kV)	atic discharge device 6250J (up to 5 µF at 50kV)
Voltage measuring range	-30 0 30 kV	-55 O 55 kV
Current measuring ranges	± 0 100 μA / 1 mA / 10 mA	
Operating temperature	-20 +40°C	
Construction	in two parts, Operation unit and High Voltage unit	
Weight Operation unit HV unit	17 kg 38 kg	17 kg 48 kg
Dimensions (W x H x D) Operation unit HV unit	37 x 34 x 20 cm 40 x 41 x 24 cm	37 x 34 x 20 cm 40 x 44 x 24 cm

Characteristics:

- Compact portable VLF test devices
- Easily portable from 1-2 person
- Simple operation
- Menue-assisted control
- Fully automatic test sequence
- Integrated timer with automatic tripping
- Integrated breakdown detection
- Integrated fault time detection
- Voltage measurement direct at HV output
- Protective ground circuit
- Protective circuit / indication in accord. with VDE 0104
- Leakage current measurement during VLF test

Scope of supply:

- Operation unit with protective bag and cable storage
- High Voltage unit
- HV-connecting cable (shielded), standard length 5m
- Connecting cable, HV unit to Operator unit, length 3m
- Ground cables
- User manual

Options:

- Datalogging (USB) for VLF test sets
- Frequency extension: 0.05 Hz
- Transport case

MADE IN GERMANY 01/2011

Tel.: +49 371 53032-10 • Fax: +49 371 53032-11 eMail: sales@kilovolt.biz • Internet: www.kilovolt.biz