# Cable Test Set

## KPG 38kV VLF







### Portable VLF cable test set with 0.1 Hz - technology

The portable cable test set KPG 38kV VLF is used for testing of medium voltage cables with extruded insulation (XLPE-, PE-, EPR-insulation) and nominal voltage up to 12.7/22kV 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 device is also able to test medium voltage cables with impregnated paper insulation. Cable sheath test with direct voltage is possible as well.

	KPG 38kV VLF
Power supply	230 V, 10 A, 50/60 Hz
Output voltage	538 kV <sub>r.m.s.</sub> , 0.1 Hz VLF (0.05 Hz optional) ± 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 <sub>r.m.s.</sub> , 0.1 Hz (app. 10 km XLPE-cable 11kV/150mm²)   6.7 μF at 19 kV <sub>r.m.s.</sub> , 0.05 Hz (app. 18 km XLPE-cable 11kV/150mm²)   1.8 μF at 38 kV <sub>r.m.s.</sub> , 0.1 Hz (app. 8 km XLPE-cable 22kV/150mm²)   3.2 μF at 38 kV <sub>r.m.s.</sub> , 0.05 Hz (app. 15 km XLPE-cable 22kV/150mm²)
Overcurrent trip (DC)	10 mA
Discharge	integrated automatic discharge device 6250J (up to 5 $\mu\text{F}$ at 50kV)
Voltage measuring range	-55 0 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 49 kg
Dimensions (W x H x D) Operation unit HV unit	37 x 34 x 20 cm 40 x 44 x 24 cm

#### **Characteristics:**

- Compact portable VLF test device
- 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

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