



Evaluate the condition of cables using VLF or DC voltage

Features

- Extremely compact high-power VLF test device
- Easily portable for 1-2 people
- Simple operation: menu-assisted control with industrial class OLED display
- Fully automatic test sequence
- Integrated timer 1-300 min with automatic tripping
- Integrated breakdown detection
- Integrated fault time detection
- Voltage measurement direct at HV output
- Protective ground connection
- High voltage start key interlock
- Protective circuit / indication in accord. with EN 50191
- Leakage current measurement during VLF test



Overview

The compact, robust and portable S VLF cable test sets are used for testing of medium voltage cables in accordance to the standards IEEE400, IEC 60502-2, CENELEC HD 620 & 621 and DIN VDE 0276/620 & 621. The test is carried out with a low strain practice with VLF (very low frequency) test voltage at 0.1 Hz frequency.

VLF test enables detection of damages of the insulation within shortest test time. The S VLF series device can test cables with extruded insulation (XLPE-, PE-, EPR-insulation) as well as cables with paper-oil insulation (PILC). Cable sheath testing with direct voltage is also possible.

Optional features

- Data logging (USB stick) for VLF test sets
- Frequency extension: 0.05 + 0.02 Hz
- Customized test cables
- Transport case





page 2 / 4 sonel.com

Technical specification

Index		S-24 VLF	S-36 VLF	S-44 VLF		S-57 VLF
		WMGBS24VLF	WMGBS36VLF	WMGBS44VLF	WMPAS44VLF	WMGBS57VLF
Power supply		230 V (±10%) 10 A, 50/60 Hz	230 V (±10%) 10 A, 50/60 Hz	230 V (±10%) 10 A, 50/60 Hz	110 V (100 V127 V) 15 A, 50/60 Hz	230 V (±10%) 10 A, 50/60 Hz
Output voltage		$\begin{array}{c} 024\text{kV}_{\text{RMS}}\text{VLF}0.1\text{Hz} \\ \text{(option:}0.05\text{Hz}+0.02\text{Hz)} \\ \pm034\text{kV}\text{DC} \end{array}$	036 kV _{RMS} VLF 0.1 Hz (option: 0.05 Hz + 0.02 Hz) ± 052 kV DC	044 kV _{RMS} VLF 0.1 Hz (option: 0.05 Hz + 0.02 Hz) ± 062 kV DC	044 kV _{RMS} VLF 0.1 Hz (option: 0.05 Hz + 0.02 Hz) ± 062 kV DC	$057 \text{ kV}_{\text{RMS}} \text{ VLF 0.1 Hz}$ (option: $0.05 \text{ Hz} + 0.02 \text{ Hz}$) $\pm 062 \text{ kV DC}$
Voltage waveshape	VLF	similar sine-wave, symmetrical, with True RMS measurement				
	DC	direct voltage, negative and positive polarity				
Overcurrent trip (DC)				10 mA		
Max. testable cable length, max. capacitance (VLF)		up to 60 km (15 µF at 24 kV _{RMS} , 0.02 Hz)*	up to 60 km (15 µF at 18 kV _{RMS} , 0.02 Hz)*	up to 60 km (15.0 µF at 18 kV _{RMS} , 0.02 Hz)*	up to 60 km (15.0 μF at 6 kV _{RMS} , 0.02 Hz)*	up to 60 km (15.0 μF at 18 kV _{RMS} , 0.02 Hz)*
		*at a cable capacitance of approx. 0.25 μF/km				
Max. load at max. output voltage (VLF) and 0.1 Hz		5 μF at 24 kV _{RMS}	2.4 µF at 36 kV _{RMS}	1.6 µF at 44 kV _{RMS}	1.0 µF at 44 kV _{RMS}	0.55 μF at 57 kV _{RMS}
Discharge - integrated automatic discharge device		max. 9000 J	max. 12500 J	max. 12500 J	max. 12500 J	max. 12500 J
Voltage meas	uring range	-40040 kV accuracy ±1%	-60060 kV accuracy ±1%	-70070 kV accuracy ±1%	-70070 kV accuracy ±1%	-70070 kV accuracy ±1%
Current measuring ranges		±0100 μA / 1 mA / 10 mA				
Operating temperature				-20+45°C		
Storage temp	erature			-25+70°C		
Duty		continuous operation				
PC interface				USB stick		
Construction		in two parts: operation unit and high voltage unit				
	Operation unit	37 x 34 x 20 cm 17 kg				
Dimensions and weight	High voltage unit	40 x 41 x 24 cm 38 kg	40 x 44 x 24 cm 48 kg	40 x 44 x 24 cm 49 kg	40 x 44 x 24 cm 49 kg	40 x 44 x 24 cm 49 kg

page 3 / 4 sonel.com

Standard accessories



High voltage connecting cable (shielded) 5 m

Bridging cables



Connecting cable between high voltage unit and station ground



Connecting cable between operation unit and protective ground



Service pack



Start keys



Case





User manual

Optional accessories



USB stick for data logging

WAADAHVVLFDL



Case with wheels \WAWALVLF2



Frequency extension 0.05 Hz + 0.02 Hz

WAADAHVVLFFE



page 4 / 4 sonel.com