



S VLF series High Voltage Insulation Testers Evaluate the condition of cables using VLF or DC voltage

Sonel[®] experience and reliability

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





Technical specification

		S-24 VLF	S-36 VLF	S-44	S-57 VLF						
Index		WMGBS24VLF	WMGBS36VLF	WMGBS44VLF	WMPAS44VLF	WMGBS57VLF					
Power supply		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		$024 \text{ kV}_{RMS} \text{ VLF } 0.1 \text{ Hz}$ (option: 0.05 Hz + 0.02 Hz) $\pm 034 \text{ kV DC}$	036 kV _{RMS} VLF 0.1 Hz (option: 0.05 Hz + 0.02 Hz) ± 052 kV DC	$044 \text{ kV}_{RMS} \text{ VLF } 0.1 \text{ Hz}$ (option: 0.05 Hz + 0.02 Hz) $\pm 062 \text{ kV DC}$	$044 \text{ kV}_{RMS} \text{ VLF } 0.1 \text{ Hz}$ (option: 0.05 Hz + 0.02 Hz) $\pm 062 \text{ kV DC}$	057 kV _{RMS} VLF 0.1 Hz (option: 0.05 Hz + 0.02 Hz ± 062 kV DC					
Voltage	VLF	similar sine-wave, symmetrical, with True RMS measurement									
waveshape	DC	direct voltage, negative and positive polarity									
Overcurrent ti	rip (DC)			10 mA							
Max. testable cable length, max. capacitance		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 _{RMSY} 0.02 Hz)*					
(VLF)		*at a cable capacitance of approx. 0.25 μF/km									
Max. load at r voltage (VLF)		5 µF at 24 kV _{RMS}	$V_{_{RMS}}$ 2.4 μ F at 36 k $V_{_{RMS}}$ 1.6 μ F at 44 k $V_{_{RMS}}$		1.0 μF at 44 $kV_{_{RMS}}$	$0.55\mu\text{F}$ at 57 $k\text{V}_{_{\text{RMS}}}$					
Discharge - integrated automatic discharge device		max. 9000 J	max. 12500 J	max. 12500 J max. 12500 J max. 12500 J		max. 12500 J					
Voltage measuring range		-40040 kV accuracy ±1%	-60060 kV accuracy ±1%	-70070 kV accuracy ±1%	-70070 kV accuracy ±1%	-70070 kV accuracy ±1%					
Current meas ranges	uring		±	0100 μA / 1 mA / 10 m	A						
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										
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					



Sonel VLF Tester Software

The programme Sonel VLF Tester Software generates a test report based on the individual recorded data files.

The first page of the generated report is an overview. The following pages describe the individual tests of the power cable system. The software is easy to use, so you can quickly create a PDF report that is attractive to the end user.

Supported languages: Polish, English, Spanish, German, Czech, Italian. It is possible to generate a report in a language other than the one set for the interface.

Cable Testing Report P(Overal Testing []Pistal Te	Oable Testin	Dened						
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Breakdown alter min	Test Voltage (kV ms) Frequency (Hz)	36.0 kV	36.0.kV	38.0 kV	36.0 kV	1112-413 E	L1L3-L2E	1213-4118
aternen 304/mm 3034/mm	Test Voltage (kV ms) Frequency (Hz) DC Voltage (kV)	36.0 kV 0,1 Hz	36.0.4V 0.1.Hz	36.0 kV 0,1 Hz	36.0 kV 0,1 Hz	L1 L2-4L3 E	L1L3→L2E	1213-411
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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

WAWALVLF

<u></u>	
=	User manual

Optional accessories



USB stick for data logging WAADAHVVLFDL



Case with wheels \WAWALVLF2



Sonel VLF Tester Software

WAPROVLFTS



Frequency extension 0.05 Hz + 0.02 Hz

WAADAHVVLFFE