




## VLF Sinus 34 kV VLF Sine Wave Test System for medium voltage cables

### Benefits

- ▶ High test capacity of 5  $\mu\text{F}$
- ▶ Suitable for outdoor use (IP 54)
- ▶ Single-button operation 
- ▶ Integrated safety system
- ▶ Protocolling
- ▶ Continuous duty cycle

### Description

The VLF sine wave 34 kV is a compact, robust and portable VLF sine wave test system for medium voltage cables. Due to the air cooling, the VLF sine wave 34 kV can be used without interruption and is therefore ideal for all users who will be testing with 0.1 Hz sine wave voltages. The VLF testing system is easy to use, thanks to its single-button operation and clear, simply structured menu and colour display. In addition to sine wave AC, its output voltage shapes also include positive and negative DC, square wave and pulsed DC for sheath-fault pinpointing.

With a test capacity of 3.5  $\mu\text{F}$  at 34 kV and weighing just 25 kg, it has an excellent capacity-to-weight ratio. With the integrated breakdown detection function, the system immediately switches off and discharges the tested cable after a breakdown. This does not only increase the user's safety, also it will limit the damage to the cable.

Logging takes place via a USB stick in .csv format for further data-processing purposes and is also saved in Easyprot format (incl. in standard delivery) for clear and structured reports.

Together with the optional available step-voltage probe ESG80-2, sheath faults can be precisely pinpointed by using the step voltage method. Moreover the VLF sine wave 34 kV can be upgraded to an accurate testing and diagnosticsystem with the optional available tan delta test attachment. Further technical details can be taken from the corresponding leaflet or ask your local representative.

### Features

- ▶ Testing without operational interruptions
- ▶ AC testing conform DIN VDE, EN, IEEE
- ▶ Compact, rugged, lightweight and IP 54 for transportation
- ▶ Integrated trolley
- ▶ Simple operation with programmable test sequences
- ▶ Maximum user safety through automatic discharge of the test object and F- $\Omega$  grounding monitoring
- ▶ Breakdown detection and load recognition (R, C)
- ▶ Quick, easy logging and updates via USB port
- ▶ In combination with the optional tan delta test attachmentsuitable for diagnosing 22kV rated cables (IEEE 400.2 conform)
- ▶ Sheath testing and sheath-fault pinpointing

### Options

- ▶ Tan delta test attachment
- ▶ ESG 80-2



Technical data			
<b>Output voltage</b>			
VLF sine wave	0 ... 24 kV <sub>eff</sub>		
DC voltage	$\pm 0$ ... 34 kV		
Square wave voltage	0 ... 34 kV		
Precision	$\pm 1\%$		
Resolution	0.1 kV		
<b>Output current</b>			
Measuring range	0 ... 14 mA		
Precision	$\pm 1\%$		
Resolution	1 $\mu\text{A}$		
Frequency range	0.01 Hz ... 0.1 Hz autom. frequency adjustment		
Output	0.6 $\mu\text{F}$ @ 0.1 Hz at 24 kV <sub>eff</sub> 5 $\mu\text{F}$ @ 0.01 Hz at 21 kV <sub>eff</sub>		
Output to cable rating voltage at 0.1 Hz		<b>Testing</b>	<b>Diagnosis</b>
		2 U <sub>o</sub>	3 U <sub>o</sub> 1.5 U <sub>o</sub>
6/10 kV	1.1 $\mu\text{F}$ (12 kV)	0.85 $\mu\text{F}$ (18 kV)	1.65 $\mu\text{F}$ (9 kV)
6.35/11 kV	1 $\mu\text{F}$ (13 kV)	0.75 $\mu\text{F}$ (19 kV)	1.55 $\mu\text{F}$ (10 kV)
12/20 kV	–	–	0.85 $\mu\text{F}$ (18 kV)
12.7/22 kV	–	–	0.75 $\mu\text{F}$ (19 kV)
Input voltage	100 V ... 260 V, 50/60 Hz, 400 VA		
Sheath testing	0 ... 5 kV, 0 ... 10 kV DC		
Sheath fault pinpointing	0 ... 5 kV, 0 ... 10 kV DC Pulse-rate 1:3 and 1:4		
Safety	F- $\Omega$ Earthing monitoring, autom. discharging of test object		
Dimensions (W x H x D)	500 x 485 x 305 mm		
Weight	25 kg		
Protection class	IP 20 / IP 54 (Operation/transportation)		
Operating temperature	-25 °C ... +55 °C		
Storage temperature	-25 °C ... +70 °C		

### Scope of delivery

- ▶ High voltage connection cable
- ▶ Power cable/ earthing cable
- ▶ Accessory bag
- ▶ USB stick for logging
- ▶ Operating manual