

VLF Sinus 62 kV

Test and diagnostic system for commissioning testing and condition analysis of medium-voltage cables



- **Performs cable withstand testing, cable diagnosis and sheath fault pinpointing**
- **Smallest and lightest unit on the market in its class**
- **Automatic result interpretation as per latest IEEE 400.2 standard**
- **Easy field operation with no need for external computer**

DESCRIPTION

The VLF Sinus 62 kV with integrated tanDelta is a compact, robust, and portable high-performance test and diagnostic system for medium voltage cables.

The 62 kV tester is a multifunctional tool: apart from VLF and DC testing, it can also perform sheath testing and sheath fault pinpointing (in combination with the step voltage probe ESGNT). Moreover, the optional internal tanDelta expands the system to assess both cable integrity and condition. The smart VLF system automatically adjusts the test frequency to the cable length, making even tests on 35 kV rated cables (up to 25 km) easy and reliable.

Field operations require no external computer. Equipped with intuitive operating software and a large internal memory, the VLF Sinus 62 kV evaluates and stores all data automatically. Via the USB port, datasets can be easily exported and processed for report generation via the PC software Easyprot (incl. in delivery). The user can review all performed measurements either immediately or at a later point in time (internally).

The well thought-out operating principle combined with simple visual commands guide the user through the entire measurement process, keeping training time to a minimum even for advanced cable diagnosis.

The system can also be used as a voltage source for the optional and lightest on the market available PD attachment, the PDS 62-SIN. Via this it can be expanded to a universal testing and diagnostic system enabling withstand testing, tanDelta diagnosis and partial discharge diagnosis.

For both VLF Sinus 62 kV and the PDS 62-SIN transport cases are optionally available allowing safe transportation and storage.

TECHNICAL DATA*

Output voltage

VLF sine wave	0 ... 44 kV _{RMS} / 0 ... 62 kV _{peak}
DC voltage	± 0 ... 62 kV
VLF rectangular voltage	0 ... 62 kV
Accuracy	± 1 %
Resolution	0.1 kV

Output current

Source output current	0 ... 40 mA
Accuracy	± 1 %
Resolution	10 µA

Frequency range	0.01 Hz ... 0.1 Hz autom. frequency adjustment
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Output load	1 µF @ 0,1 Hz at 44 kV _{RMS} 10 µF maximum test capacity
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Internal tanDelta

Measuring frequency	0.01 ... 0.1 Hz
Measuring range	10 ⁻⁴ ...10 ⁰
Accuracy	10 ⁻⁴
Resolution	10 ⁻⁵
Sheath testing	0 ... 5 kV, 0 ... 10 kV, 0 ... 20 kV DC 0 ... 5 kV, 0 ... 10 kV, 0 ... 20 kV DC

Sheath fault pinpointing	Pulse rate 0.5:1, 1:2, 1:3, 1:4 and 1.5:0.5
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Safety	autom. discharging of the test object
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Input voltage	100 V ... 264 V, 50/60 Hz, 2000 VA
Duty cycle	continuous

Internal memory	For at least 1000 measurements
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Dimensions (W x H x D)	544 x 520 x 416 mm
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Weight	59 kg
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Protection class	IP 21
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Operating temperature	- 20 °C ... + 55 °C
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Storage temperature	- 20 °C ... + 70 °C
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FEATURES

- High test capacity of up to 10 µF
- Continuous duty cycle
- Intuitive user software with large internal memory
- Leakage current measurement in DC and VLF rectangular mode
- Optional internal tanDelta with automatic evaluation acc. to IEEE
- Via optional PDS 62-SIN PD coupler expandable to a full test and diagnostic test set
- Maximum user safety through automatic discharge of the test object
- Breakdown detection and load recognition (R, C)
- Quick, easy logging and updates via USB port
- Sheath testing and sheath fault pinpointing acc. to IEC 60229
- Monitored withstand testing in TD and PD mode

SCOPE OF DELIVERY

- VLF Sinus 62 kV
- Fixed HV connection cable in 5 or 10 m length
- Mains cable/grounding cable 3/5 m
- Fixed accessory bag
- USB stick for logging
- Easyprot reporting software
- Operating manual

ORDERING INFORMATION

Product	Order no.
VLF Sinus 62 kV with 5m HV lead	1011502
VLF Sinus 62 kV with 10m HV lead	1011498
VLF Sinus 62 kV with 5m HV lead and internal tanDelta	1011506
VLF Sinus 62 kV with 10m HV lead and internal tanDelta	1011504
Options:	
PDS 62-SIN PD attachment	1009853
Transport case VLF Sinus 62 kV	90028932
Transport case PDS 62-SIN	90023948
ESG NT step voltage probe	1004629-S
Test/calibration certificate VLF Sinus 62 kV	2011621

* We reserve the right to make technical changes.

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