VLF-PD34

Partial Discharge Diagnostics System for VLF Hipot Test Sets

Add partial discharge detection and fault localization to VLF-34TD and VLF-45TD testing — 1 pC sensitivity, defects located to within 1 % of cable length on runs up to 20 km.



Operating voltage	**1 – 24 / 34 kV RMS / kV peak**	Max. withstand voltage	**68 kV**
Rated current	**1 A**	Sampling rate	**125 MHz**
Coupling capacitor	**1 nF**	Weight	**18.4 kg**

SPECIFICATIONS

Operating	
Operating voltage	**1 – 24 kV RMS / 34 kV peak at 0.1 Hz**
Rated current	**1 A**
High-voltage coupling capacitor	**1 nF**
Maximum withstand voltage	**68 kV**
Excitation	**Pure sinusoidal, combined with VLF generator**
PD Localization	
Measuring range	**20,000 m at 80 m/µs propagation**
Sampling rate	**125 MHz**
Localization accuracy	**1 % of cable length**
Resolution	**≤ 1 pC / ≤ 1 m**
Compatibility	
Supported VLF test sets	**VLF-34TD and VLF-45TD (current support)**
Tan-delta diagnostics	**Available in combination with VLF-34TD / VLF-45TD**
Mechanical	
Weight	**18.4 kg**
Dimensions	**310 × 260 × 750 mm**

KEY FEATURES

Partial discharge detection and localization — Measures PD in cable insulation and pinpoints the source, separating cable-body defects from joint and termination defects.

1 pC sensitivity, 1 m resolution — Resolves discharge down to 1 pC with 1 m distance resolution.

Localization to 1 % of cable length — Places the discharge site within 1 % of cable length over runs up to 20 km.

1 nF coupling capacitor, 68 kV withstand — High-voltage coupling capacitor rated for 68 kV maximum withstand voltage.

Stable sinusoidal 0.1 Hz excitation — With the VLF generator it applies a pure sinusoidal 1 – 24 kV RMS / 34 kV peak output at 0.1 Hz.

Built for the VLF-34TD and VLF-45TD — Current supported hosts; in that combination tan-delta diagnostics can also be performed.

TYPICAL APPLICATIONS

- Cable acceptance PD testing — PD measurement on newly installed or repaired shielded cable, alongside the VLF withstand test.
- Joint and termination diagnostics — Localizing discharge at cable accessories, where a large share of circuit defects occurs.
- Maintenance PD surveys — Periodic PD measurement to trend insulation condition on in-service circuits.
- VLF-34TD and VLF-45TD users — Current supported hosts; the PD unit works with the VLF set and its generator output.

Specifications subject to change without notice; confirm critical parameters at order. Calibration records on request.