

HVA45TD

the smallest VLF test system of its performance class
with integrated Tan Delta diagnostics system



45 kV_{peak} 32 kV_{rms}
48 kV_{peak} 34 kV_{rms}
Option*



39 kg



integrated
TD diagnostics

The HVA45TD is a truly compact and portable VLF test set system for testing medium voltage cables. It performs **VLF** and **DC** testing, **sheath testing with sheath fault location mode** and **TD leakage current correction** (guard terminal) is included. Assessments of cable condition can also be carried out by use of **Tan Delta Diagnostics**.

MWT: the recently introduced **Monitored Withstand Test (MWT)**, a combination of Withstand Testing and Tan Delta Diagnostics in compliance with IEEE 400.2-2013, can be performed.

Performance: the HVA45TD offers outstanding features in terms of size, weight (39 kg) and performance (max. 10 μ F).

Safety: the instrument has two independent earthing devices (electronic and mechanical discharging) and an integrated 12 kV feed-back protection system to protect both operator and instrument.

Field use: a watertight and very rugged case with a protection class of IP67 makes additional transport boxes obsolete.

Connectivity: on site, no external PC is needed. All results can be downloaded later by USB or Bluetooth for further investigation and easy report creation on the PC Software.

Unlimited operating time: Operating time of the HVA high voltage generators are not thermally limited and can be operated continuously.



Features

- Output voltage 45 kV_{peak} 32 kV_{rms}
- + 3 kV option*: 48 kV_{peak} 34 kV_{rms}
- Pure sinusoidal output voltage (load-independent)
- Internal TD measurement with high accuracy (1×10^{-4})
- Tan Delta measurement with various frequencies (0.01-0.1 Hz)
- Leakage Guard® - leakage current correction
- Output current 60 mA max.
- 1.0 μ F @ 0.1 Hz @ 32 kV rms
- Highest test capacity of 10 μ F
- Ultra light and compact weight (39 kg)
- Protection class IP67 (with closed lid)
- Total protection: almost unbreakable, watertight, dustproof and corrosion proof case
- Large Colour display (4,3")
- USB and Bluetooth connections
- Cable testing according: IEC60502-2:2015, IEEE 400.2-2004, CENELEC HD 620/621, IEEE400.2-2013 etc.
- Programmable test sequences
- Upgradable with Partial Discharge diagnostics system (optional)
- 12 kV transient protection (50 Hz)
- Dual Discharge Device (DDD®), integrated electronic and mechanical discharge devices
- Easily exchangeable HV cable
- Intuitive menu operation
- Sheath Fault Locating (in combination with Earth Fault Locator) (not included)
- Vacuum Bottle Test
- Insulation Testing

HVA45TD



dry system



upgradeable to PD diagnostics system



unlimited operating time



Trolley type

Type		HVA45TD
Article number		SH5011
Input voltage		100-240 V, 50/60 Hz, 1200 VA
Output voltage	VLF sine wave	0-45 kV peak, 32 kV rms
	+3 kV Option*	0-48 kV peak, 34 kV rms (Art. Nr. GH5845)
	DC	± 0-45 kV
	VLF square wave	0-45 kV
	accuracy	± 1 %
	resolution	0.1 kV
Output current		0-60 mA
Resistance range		0.1 MΩ-5 GΩ
Output frequency		0.01-0.1 Hz in steps of 0.01 Hz default: 0.1 Hz (auto frequency)
Tan Delta	accuracy	± 1 x 10 ⁻⁴
Output load		1.0 μF @ 0.1 Hz @ 32 kV rms 10.0 μF maximum Capacitance ¹
Sheath test	max. test voltage	10 kV
	trip current	0.1-5.0 mA
Sheath fault location ²	max. test voltage	10 kV
	Pulse/Period	1:3 / 4 s, 1:5 / 4 s, 1:5 / 6 s, 1:9 / 6 s
Output Modes		AC (VLF) Symmetrical and load independent across full range, DC (plus or negative polarity), Burn-/Fault Condition or Fault Trip Mode, Jacket/Sheath Testing
Safety		12 kV/50 Hz Feedback Protection integrated electronic and mechanical discharge devices - DDD®: Dual Discharge Device (internal)
Memory		50 Test Record Stored, USB almost unlimited
Metering		Voltage and Current (True rms and/or peak), Capacitance, Resistance, Time, Flashover Voltage
Duty cycle		Continuous! No thermal limitation for operating time.
HV-Cable		5 m with clamps
Software		"b2 ControlCenter" (included)
Computer interfaces		Bluetooth and USB flash drive
Dimensions LxWxH		500 x 305 x 457 mm (Peli Case)
Weight		39 kg
Environment		temperature: storage -25°C to + 70°C, operating -20°C to + 55°C humidity: 5-85 % non condensing

¹ at lower frequency and voltage | ² in combination with locating device (not in scope of supply)

* default: the HVA45TD is supplied with an output voltage of 45 kV_{peak} 32 kV_{rms}. The option +3 kV must be ordered additionally.

Options

- Partial Discharge diagnostics system

Scope of delivery

- HVA45TD testing device incl. Tan Delta diagnostics
- PC Software - b2 ControlCenter
- HV cable 5 m
- Power and earthing cable
- Accessory bag
- USB Stick
- Operating manual