

# HVA28TD

the smallest VLF test system of its kind  
with integrated Tan Delta Diagnostics

- VLF and DC output
- Sheath Test
- Sheath Fault Location Mode
- Vacuum Bottle Test
- PD system upgrade available
- Insulation Testing

The HVA28TD 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**.

**New** - 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 HVA28TD offers outstanding features in terms of size, weight (14 kg) and performance (max. 10  $\mu$ F).

**Safety** - the instrument has two independent earthing devices (electronic and mechanical discharging) and an integrated 12 kV feedback 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.



## Features

- Output voltage 28 kV<sub>peak</sub> / 20 kV<sub>rms</sub>
- Pure sinusoidal output voltage (load-independent)
- Internal TD measurement with high accuracy ( $1 \times 10^{-4}$ )
- Tan Delta measurement with various frequencies (0,01 – 0,1 Hz)
- Leakage Guard® - leakage current correction
- Output current 20 mA max.
- Highest test capacity of 10  $\mu$ F
- Ultra light and compact weight (14 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 diagnostic system (optional)
- Integrated 12 kV transient protection (50 Hz)
- Dual Discharge Device (DDD®), two integrated and automatic discharge devices
- Easily exchangeable HV cable
- Intuitive menu operation
- Sheath Fault Locating (in combination with Earth Fault Locator)<sup>1</sup>
- Vacuum Bottle Test
- Insulation Testing

[www.b2hv.at](http://www.b2hv.at)

**b2**  
electronicgmbh

<sup>1</sup> not in scope of supply

# HVA28TD

## VLF High Voltage Test Set with integrated Tan Delta

Type	HVA28TD	
Article number	SH0216	
Input voltage	100 - 240 V, 50/60 Hz, 400 VA	
Output voltage	VLF sine wave	0 - 28 kV peak, 20 kV rms
	DC	± 0 - 28 kV
	VLF square wave	0 - 28 kV
	accuracy	± 1%
	resolution	0.1 kV
Output current	0 - 20 mA (resolution 1 µA) accuracy: ±1%	
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 <sup>-4</sup>	
Output load	0.5 µF @ 0.1 Hz @ 20kV rms   5.0 µF @ 0.01 Hz @ 20 kV rms 10.0 µF maximum Capacitance! <sup>1</sup>	
Sheath test	max. test voltage	10 kV
	trip current	0.1 mA - 5.0 mA
Sheath fault location <sup>2</sup>	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	50 Hz - 12 kV feedback protection/ Dual Discharge Device (internal)	
Record storage	Built-in memory: up to 50 reports & 50 test sequences USB flash drive: unlimited	
Metering	voltage and current (true rms and/or peak), capacitance, resistance, time, flashover voltage	
HV Cable	4 m with clamps	
PC Software	"b2 Control Center" (included)	
Computer interfaces	Bluetooth and USB	
Dimensions LxBxH	L 416 x W 221 x H 334 mm (Peli Case)	
Weight	14 kg	
Environment	temperature: storage -25°C to + 70°C, operating -20°C to + 55°C humidity: 5-70 % non condensing	

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

DHV1299 Rev04 - ENGLISH - Subject to alternations. Errors excepted. Illustrations are not binding.



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## Options

- Partial Discharge Diagnostics System

## Scope of delivery

- HVA28TD Testing Device incl. Tan Delta Diagnostics
- PC Software - b2 ControlCenter
- 4 m HV cable
- Power and earthing cable
- Accessory Bag
- USB Stick
- Operating Manual