



General Catalogue

CABLE TESTING & DIAGNOSTICS
TRANSFORMER OIL TESTING



b2 electronics – the right choice

With partners in more than 80 countries, we are always close to our customers. From our first interaction to delivery and beyond, we share our knowledge and attach great importance to a trustful partnership.

b2 electronics offers a wide range of VLF hipot test sets with max. output voltages from 29 kV up to 200 kV. Providing high modularity, they serve as ideal high voltage sources for our TD and PD diagnostics systems.

OUR PRODUCT PORTFOLIO

VLF CABLE TESTING, DIAGNOSTICS & TRANSFORMER OIL TESTING



VLF CABLE TESTING

VLF cable testing with 0.01 Hz to 0.1 Hz is a standardized and state-of-the-art method to determine the condition of cables in medium- and high voltage networks. Compared to DC testing, it prevents damage to the insulation of aged extruded cables which can cause premature loss and is suitable for various insulations, e.g. XLPE, PILC, PE, EPR.

Due to the negative side effects of DC hipot testing, VLF AC waveform testing of MV and HV cables during tests for installation, acceptance or maintenance is nowadays recommended by most of the cable testing standards, including IEEE 400.2, IEC 60502-2, IEC 60229, DIN VDE 0276-620 and 0276-621, CENELEC HD 620 S2 and HD 621 S1.



INSULATION OIL TESTING

Ultra-light breakdown analyzers from b2 electronics are straightforward to operate and ideally suited for both laboratory and on-site transformer insulation oil testing, performing a fully automated oil breakdown test.

In order to fit the needs of all our clients, we offer a wide range of reliable transformer oil testers, with test voltages up to 100 kV (sine wave). Breakdown Analyzer test sets from b2 electronics include predefined and fully automatic test sequences which are in compliance with all relevant international standards.



VLF CABLE DIAGNOSTICS

Conducting diagnostics on MV and HV cables enables early detection of vulnerabilities and prevents potential breakdowns. Partial discharge (PD) diagnostics allows a precise analysis of cables, joints and terminations. By finding the exact PD location, detected damages can be fixed before they result in a cable failure. This leads to massive improvement in the network stability and reduction of repair costs.

Tan Delta (TD) diagnostics is a proven, simple, and reliable test method for evaluating the overall dielectric condition of cables and other electrical systems. As water trees in aged polymeric cables (e.g. XLPE) do not generate PD by themselves, they can be determined conducting a TD test only.



b2 SOFTWARE SOLUTIONS

For each of our product ranges b2 electronics offers a tailor-made powerful software solution which features flexible and fast data acquisition, customized test sequences and extensive reporting capabilities.

b2 ControlCenter is a versatile software solution for HVA test sets. b2 Suite is a software for testing, diagnosis and report management. BA ControlCenter is a software for comprehensive, fast and accurate transformer insulation oil tests. All b2 software solutions are updated on a regular basis to add new features and functionalities.



HVA VLF CABLE TEST SETS

HVA VLF CABLE TEST SETS

Test sets of the HVA series are truly compact and portable VLF test sets which determine the condition of MV and HV cables at frequencies from 0.01 Hz to 0.1 Hz. They all perform VLF withstand testing, DC testing, as well as sheath testing with sheath fault location mode (additional sheath fault locator needed).

b2's VLF test sets provide cable testing in ranges of max. output voltages from 24 kV_{rms} / 34 kV_{peak} to 141 kV_{rms} / 200 kV_{peak} with weights starting at only 19.5 kg / 43 lbs.



HVA120



HVA30-7

EXTRA POWER TEST SETS

These are HVA series members with an output current up to 120 mA, extending greatly the load possibilities and testable length of a cable.

YOUR BENEFITS

- Pure sinusoidal output voltage (load-independent) over the entire power range
- Easily exchangeable HV test lead
- Breakdown voltage and load detection
- Integrated 12 kV transient protection (at 50/60 Hz)
- Real time oscilloscope view of the output voltage on the HVA display
- Programmable test sequences with a tailor-made software tool



UNLIMITED OPERATING TIME

HV generators are designed for continuous operation without any thermal limitations.



DRY SYSTEM (UP TO 120 KV)

HVA test sets are constructed with non-arcing contacts and no need to change the oil. This eliminates routine servicing and makes the test sets almost maintenance-free.



COMPACT AND PORTABLE

Our HVA series have been designed for maximum portability and on-site use. It makes them widely applicable for any type of in-field use.



DUAL DISCHARGE DEVICE (DDD)

An additional mechanical discharge unit acts as a backup to the electronic discharge device and doubles the operational safety of all HVA test sets.





smartVLF® CABLE TEST SETS

smartVLF® CABLE TEST SETS

Our ultra-light and powerful smartVLF® test sets determine the condition of medium voltage cables at frequencies from 0.01 Hz to 0.1 Hz. They all perform VLF withstand testing, DC testing, as well as sheath testing with sheath fault location mode (additional sheath fault locator needed). These VLF test sets provide cable testing in ranges of max. output voltages from 21 kV_{rms} / 29 kV_{peak} to 34.6 kV_{rms} / 49 kV_{peak} at weights as low as 14 kg / 31 lbs. to 39 kg / 86 lbs.

INTERGRATED TD FUNCTIONALITY

In order to meet international test guides (e.g. IEEE 400.2) smartVLF® test sets can be ordered with an optional integrated Tan Delta diagnostics unit, allowing Monitored Withstand Tests. Additionally, all systems can be operated with an external PD diagnostics system.

YOUR BENEFITS

- TD measurements with an accuracy of $\pm 0.1 E-3$
- Pure sinusoidal output voltage (load-independent) over the entire power range
- Easily exchangeable HV test lead
- Safety: Dual Discharge Device (DDD) and integrated 12 kV transient protection (at 50/60 Hz)
- Programmable test sequences with a tailor-made software tool



HVA28TD

HVA45TD



BLUETOOTH® & USB2

The computer software can be effortlessly connected via Bluetooth®. This allows live monitoring of measurements. A USB 2.0 interface secures simple upload and download of data or test sequences.



IP67

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



MONITORED WITHSTAND TEST

The TD versions of our smartVLF® test sets combine cable testing and TD diagnostics as per IEEE 400.2 guide.



TROLLEY VERSIONS

HVA34-1, HVA34TD-1, HVA45 and HVA45TD test sets are equipped with a trolley mounted to the housing for even easier handling.



HVA FAMILY

smartVLF®

HVA28
SH5001

HVA28TD*
SH5002



HVA34-1
SH5007

HVA34TD-1*
SH5008



HVA45
SH5010

HVA45TD*
SH5011



+ 4 kV Option**

Output voltage
(VLF sinusoidal)
34.6 kV_{rms}
49 kV_{peak}

EXTRA POWER

HVA30-7
SH5005



HVA40-5
SH5009



HVA54-3
SH5012



HVA68-2
SH5016



Output voltage	HVA28	HVA34-1	HVA45	HVA30-7	HVA40-5	HVA54-3	HVA68-2
- VLF sinusoidal	0 ... 21 kV _{rms} / 0 ... 29 kV _{peak}	0 ... 24 kV _{rms} / 0 ... 34 kV _{peak}	0 ... 32.3 kV _{rms} / 0 ... 45 kV _{peak}	0 ... 24 kV _{rms} / 0 ... 34 kV _{peak}	0 ... 32 kV _{rms} / 0 ... 45 kV _{peak}	0 ... 38 kV _{rms} / 0 ... 54 kV _{peak}	0 ... 48 kV _{rms} / 0 ... 68 kV _{peak}
- DC	-28 kV ... 28 kV	-34 kV ... 34 kV	-45 kV ... 45 kV	-34 kV ... 34 kV	-45 kV ... 45 kV	-54 kV ... 54 kV	-65 kV ... 65 kV
- VLF squarewave	0 ... 28 kV	0 ... 34 kV	0 ... 45 kV	0 ... 34 kV	0 ... 45 kV	0 ... 54 kV	0 ... 60 kV
Output current (max.)	17 mA	45 mA	45 mA	120 mA	120 mA	120 mA	88 mA
Output load	0.5 µF @ 0.1 Hz @ 21 kV _{rms} 0.9 µF @ 0.1 Hz @ 16 kV _{rms}	1.5 µF @ 0.1 Hz @ 24 kV _{rms} 2.2 µF @ 0.1 Hz @ 20 kV _{rms}	0.9 µF @ 0.1 Hz @ 32 kV _{rms} 0.8 µF @ 0.1 Hz @ 34 kV _{rms}	6.0 µF @ 0.1 Hz @ 24 kV _{rms} 7.2 µF @ 0.1 Hz @ 20 kV _{rms}	3.8 µF @ 0.1 Hz @ 32 kV _{rms} 5.0 µF @ 0.1 Hz @ 27 kV _{rms}	2.7 µF @ 0.1 Hz @ 38 kV _{rms} 3.6 µF @ 0.1 Hz @ 33 kV _{rms}	1.7 µF @ 0.1 Hz @ 48 kV _{rms} 2.1 µF @ 0.1 Hz @ 43 kV _{rms}
Max. load capacitance ¹	10 µF	10 µF	10 µF	15 µF	15 µF	10 µF	10 µF
Weight	14 kg / 31 lbs.	39 kg / 86 lbs.	39 kg / 86 lbs.	57 kg / 125.6 lbs.	57 kg / 125.6 lbs.	57 kg / 125.6 lbs.	57 kg / 125.6 lbs.

VLF TEST SETS

HVA34
SH5006



HVA60
SH5014



HVA90
SH5017



HVA94
SH5018



HVA120
SH5019



HVA200
SH5020



Output voltage	HVA34	HVA60	HVA90	HVA94	HVA120	HVA200
- VLF sinusoidal	0 ... 24 kV _{rms} / 0 ... 34 kV _{peak}	0 ... 44 kV _{rms} / 0 ... 62 kV _{peak}	0 ... 64 kV _{rms} / 0 ... 90 kV _{peak}	0 ... 66 kV _{rms} / 0 ... 94 kV _{peak}	0 ... 85 kV _{rms} / 0 ... 120 kV _{peak}	0 ... 141 kV _{rms} / 0 ... 200 kV _{peak}
- DC	-34 kV ... 34 kV	-60 kV ... 60 kV	-90 kV ... 90 kV	-90 kV ... 90 kV	-100 kV ... 100 kV	-200 kV ... 200 kV
- VLF squarewave	0 ... 34 kV	0 ... 60 kV	0 ... 90 kV	0 ... 90 kV	0 ... 100 kV	0 ... 200 kV
Output current (max.)	14 mA	44 mA	57 mA	57 mA	80 mA	140 mA
Output load	0.4 µF @ 0.1 Hz @ 24 kV _{rms} 0.6 µF @ 0.1 Hz @ 20 kV _{rms}	1.0 µF @ 0.1 Hz @ 44 kV _{rms} 1.4 µF @ 0.1 Hz @ 33 kV _{rms}	1.0 µF @ 0.1 Hz @ 64 kV _{rms} 1.5 µF @ 0.1 Hz @ 43 kV _{rms}	0.9 µF @ 0.1 Hz @ 66 kV _{rms} 1.4 µF @ 0.1 Hz @ 43 kV _{rms}	0.5 µF @ 0.1 Hz @ 85 kV _{rms} 2.0 µF @ 0.1 Hz @ 43 kV _{rms}	0.6 µF @ 0.1 Hz @ 141 kV _{rms} 0.8 µF @ 0.1 Hz @ 120 kV _{rms} 1.0 µF @ 0.1 Hz @ 110 kV _{rms}
Max. load capacitance ¹	12 µF	10 µF	10 µF	10 µF	5 µF	10 µF
Weight	19.5 kg / 43 lbs.	57 kg / 125.6 lbs.	127 kg / 280 lbs.	128 kg / 282.2 lbs.	198 kg / 436.5 lbs.	ca. 950 kg / 2094 lbs.

* with integrated Tan Delta Diagnostics | ** default: the HVA45TD is supplied with an output voltage of 45 kV_{peak}, 32.3 kV_{rms}. The option + 4 kV must be ordered additionally. | ¹ at lower frequency and voltage



b2 CONTROL CENTER



CUSTOMIZED TEST SEQUENCES
Individual test sequences can be created with the help of the sequence editor and uploaded to the test device.



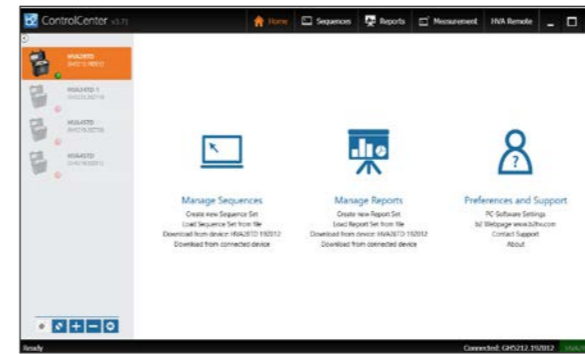
EASY REPORTING
Reports can be easily generated and managed, offering many measurement and graph options, as well as several formats for individual data processing and customized reporting of test results.



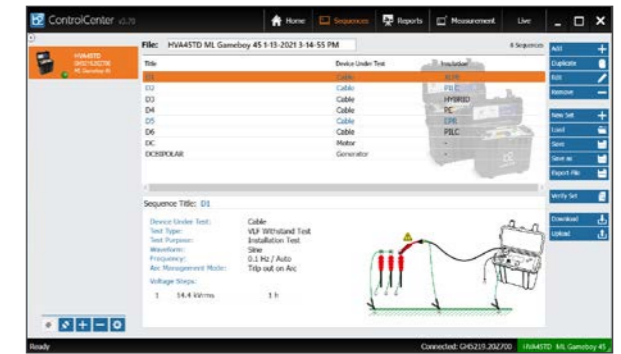
MONITORED WITHSTAND TEST
b2 CC visualizes live data of a simultaneously ongoing VLF cable and TD diagnostics test, as per IEEE 400.2.



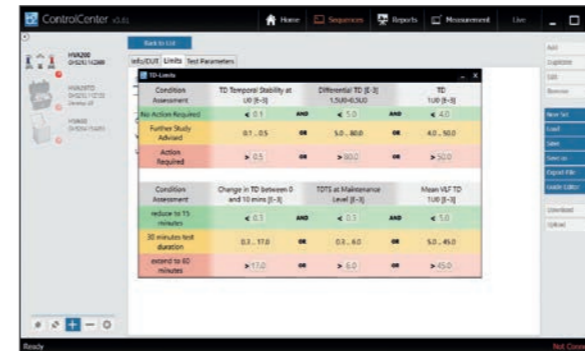
HVA REMOTE (OPTIONAL)
Test sequences on the HVA generators can be both managed and monitored remotely via PC for increased safety and convenience.



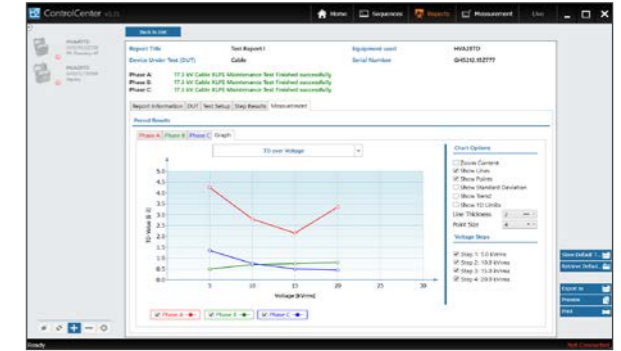
User interface



Report management



MWT - TD limits setting



Tan Delta diagnostics

POWERFUL SOFTWARE SOLUTION FOR HVA TEST SETS

b2 ControlCenter (b2 CC) is designed for all HVA test sets from b2 electronics. It features flexible and fast data acquisition, customized test sequences and extensive reporting capabilities. For HVA test sets with internal TD diagnostics unit, b2CC serves as a comprehensive diagnostics platform providing an even wider range of options, such as defining, executing and viewing the Monitored Withstand Test (MWT).

YOUR BENEFITS

- Connect devices via Bluetooth® or serial connection (depending on the device being used)
- Manage customized or pre-programmed sequences and upload them to the test set
- Get real-time measurement data from the connected test set and create reports directly on your computer
- Extensive reporting capabilities



HVA200



TAN DELTA AND PARTIAL DISCHARGE DIAGNOSTICS

HVA200 can be extended to a complete cable diagnostic system at any time.



UNLIMITED OPERATING TIME

HV generators are designed for continuous operation without any thermal limitations.



FLEXIBLE POSITIONING

The system can be arranged in a space-saving V-type configuration. The angle between DC towers can be changed from 60° to 180°.



DUAL DISCHARGE DEVICE (DDD)

An additional mechanical discharge unit acts as a backup to the electronic discharge device and doubles the operational safety of all HVA test sets.

PURE SINUSOIDAL VLF HIPOT TEST SET WITH 200 KV

VLF output voltages of up to 200 kV_{peak} allow performing voltage withstand tests on assets with test voltages as high as 141 kV_{rms} / 200 kV_{peak}. Our HVA200 system is far more compact and lightweight than any other withstand testing solution providing this voltage level. The test system can optionally be upgraded with a highly sensitive cable diagnostics module to perform PD and TD diagnostics in addition to the withstand test. Trailer or mobile versions are available.



YOUR BENEFITS

- Pure sinusoidal output voltage (load-independent) over the entire power range
- Easily exchangeable HV test lead
- Breakdown voltage and load detection
- Integrated 12 kV transient protection (at 50/60 Hz)





HVA200 TRAILER & TRUCK VERSIONS



TRAILER VERSION

Mounted on a compact and easily towable trailer, HVA200 can be moved to testing spots with limited access, such as small substations or urban surroundings.

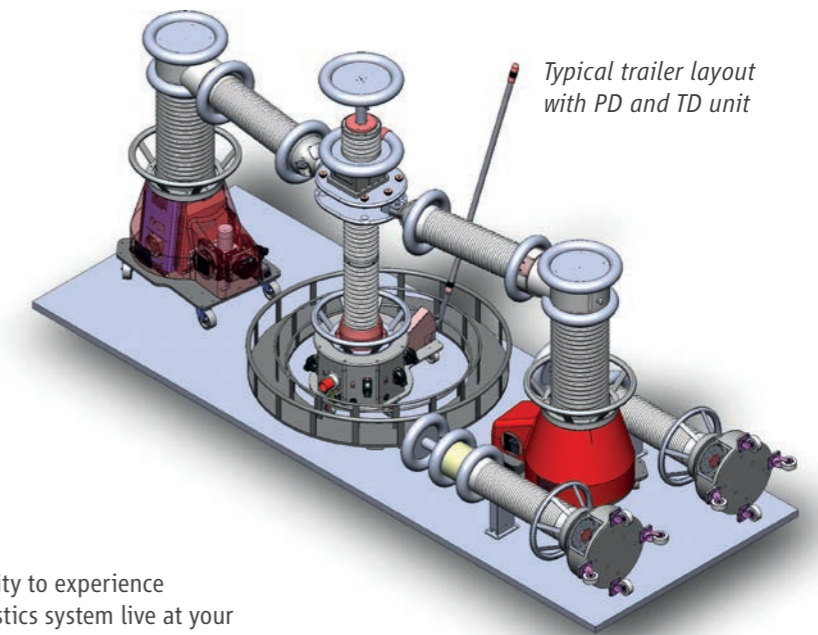


TRUCK VERSION

Thanks to the flatbed design – optionally available with a retractable platform – the HVA200 system is perfectly prepared for truck installation. Due to its light weight, even lighter truck models with less maximum vehicle payload can be chosen as a basis.

HVA200 MOBILE VERSION

HVA200 is available as mobile version – either completely pre-mounted on a trailer or prepared for mounting on a light truck provided by the customer. It enables voltage withstand testing as well as PD and TD diagnostics for comprehensive condition assessment of high-voltage cables. Its fast set-up time paired with the compact dimensions make it a true alternative to resonance test sets in terms of size and investment needs.



HVA200 ON TOUR

b2 electronics offers you a unique possibility to experience the HVA200 - 200 kV VLF test and diagnostics system live at your site. Apply on our website or via sales@b2hv.com for a measurement (VLF test, PD and TD) on your cable and get to know the versatility of the HVA200 system.

The b2 team will demonstrate the setup, all functions, perform a real measurement and discuss the measurement results with you.





PARTIAL DISCHARGE & TAN DELTA DIAGNOSTICS

PD & TD SERIES

PARTIAL DISCHARGE (PD) DIAGNOSTICS

b2 electronics offers the widest range of PD measurement solutions for cables on the market, from portable and modular PD instruments up to trailer-mounted systems for max. output voltages as high as 141 kV_{rms}. PD diagnostics can be carried out simultaneously with TD diagnostics. This saves time and prevents pre-conditioning of the cable by the first of two sequential tests.



PDTD90-2

TAN DELTA (TD) DIAGNOSTICS

b2 electronics offers different TD diagnostics solutions. Our smart VLF[®] test sets with a built-in TD functionality underline the portability of the HVA test sets as the smallest VLF high voltage generators on the market.

We also offer external TD devices which enable updating any HVA test set with a TD diagnostics unit. Further on, we offer PDTD devices that provide full VLF diagnostics possibilities by performing PD and TD measurements simultaneously at the same time.



TD30



Outdoor case

YOUR BENEFITS

- Tailor-made VLF, TD and PD test system from one hand
- Easy handling and simple wiring
- PD measurement setup according to IEC 60270
- Locate and define possible PD faults in your DUT (see details at b2 Suite)
- Guard - leakage current correction for TD diagnostics available



COMPACT & PORTABLE

Our TD and PD systems have been designed for maximum portability and on-site use. This makes them utilizable for versatile applications, e.g. off-shore.



TRUE MODULARITY

All our HVA test sets can be easily extended to a complete diagnostics system by adding TD, PD or PDTD series products at a later point of time. This keeps the initial investment low.



AUTOMATIC MODE

With the b2 Suite software, you get manual and incremental test modes with self-explanatory menus, as well as a fully automatic measurement mode reducing operation efforts.



SIMULTANEOUS TD & PD MEASUREMENT

Included (or extendable) diagnostics units allow parallel measurement of TD and PD levels, resulting in significant time savings. This prevents pre-conditioning of the cable which might be caused by the first of two sequential tests.



Corona shields

TD FAMILY

TD30
SH5021



TD60-MC
SH5023



TD90-MC
SH5025



TD120-MC
SH5026



Voltage				
- sine wave	1 - 24 kV _{rms}	1 - 44 kV _{rms}	1 - 64 kV _{rms}	1 - 85 kV _{rms}
- frequency	0.1 Hz, 0.01 - 0.09 Hz	0.1 Hz, 0.01 - 0.09 Hz	0.1 Hz, 0.01 - 0.09 Hz	0.1 Hz, 0.01 - 0.09 Hz
Voltage measurement				
- resolution / accuracy	0.1 kV _{rms} / 1 % of reading	0.1 kV _{rms} / 1 % of reading	0.1 kV _{rms} / 1 % of reading	0.1 kV _{rms} / 1 % of reading
Current measurement				
- resolution / accuracy	1 μA _{rms} / 1 % of reading	1 μA _{rms} / 1 % of reading	1 μA _{rms} / 1 % of reading	1 μA _{rms} / 1 % of reading
Tan Delta				
- resolution / accuracy	1 x 10 ⁻⁵ / ± 1 x 10 ⁻⁴	1 x 10 ⁻⁵ / ± 1 x 10 ⁻⁴	1 x 10 ⁻⁵ / ± 1 x 10 ⁻⁴	1 x 10 ⁻⁵ / ± 1 x 10 ⁻⁴



PD FAMILY

PD30-E
SH5027



PD60-2
SH5030



PD90-2
SH5032



PD120-2
SH5035



PDTD200-2*
SH5037

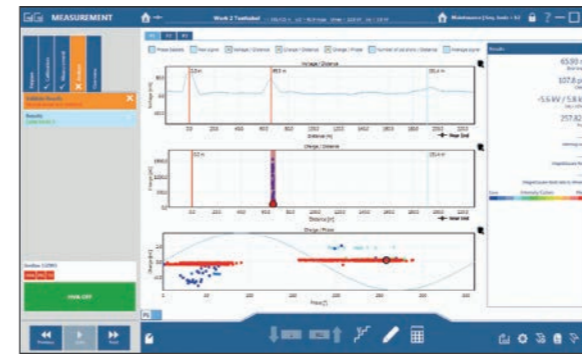


Voltage					
- sine wave	34 kV, 24 kV _{rms}	62 kV, 44 kV _{rms}	90 kV, 64 kV _{rms}	120 kV, 85 kV _{rms}	200 kV, 141 kV _{rms}
Capacitance					
Coupling Capacitor	~ 1 nF	~ 1 nF	~ 1 nF	~ 1 nF	~ 0.75 nF
Velocity range (v/2)	10 - 150 m/μs	10 - 150 m/μs	10 - 150 m/μs	10 - 150 m/μs	10 - 150 m/μs
PD background level	< 10 pC	< 10 pC	< 10 pC	< 10 pC	< 10 pC
Sample rate up to	250 MS/s	250 MS/s	250 MS/s	200 MS/s	200 MS/s
Bandwidth	100 MHz analog filter	100 MHz analog filter	100 MHz analog filter	100 MHz analog filter	100 MHz analog filter
Tan Delta (resolution / accuracy*)		1 x 10 ⁻⁵ / ± 1 x 10 ⁻⁴	1 x 10 ⁻⁵ / ± 1 x 10 ⁻⁴	1 x 10 ⁻⁵ / ± 1 x 10 ⁻⁴	1 x 10 ⁻⁵ / ± 1 x 10 ⁻⁴

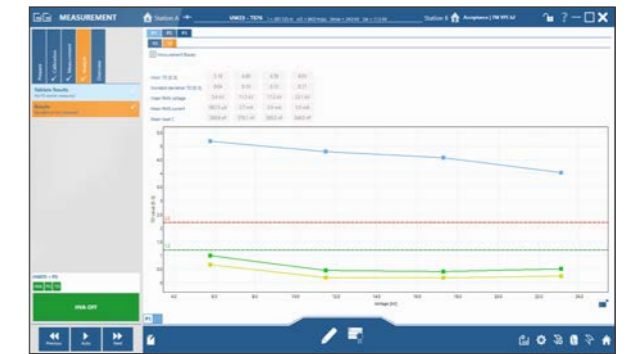
* with integrated Tan Delta Diagnostics



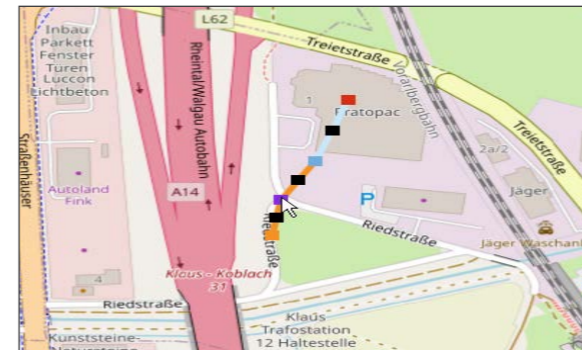
b2 SUITE



Phase-resolved PD pattern



TD over voltage chart



Direct mapping of cable trace (b2 Suite v2.0 or higher)

Name	Cond.	Stat.	Stat.	Type	Length	Position	Model	PD	TD
PHASE TOPOLOGY P1									
10kV ALPE	30 M	30 M	30 M	Cable	33.00 m	30 M	PLC	1	1
32 M2 - 32 m	30 M	30 M	30 M	Cable	33.00 m	30 M	PLC 1 Phase Intra	1	1
32 M2 - 32 m	30 M	30 M	30 M	Cable	46.94 m	30 M	VPS/KLPE Standard	1	1
32 M2 - 32 m	30 M	30 M	30 M	Termination	100.00 m	30 M	Termination ALPE	1	1
PHASE TOPOLOGY P2									
32 M2 - 32 m	30 M	30 M	30 M	Termination	0.00 m	30 M	Termination PLC	1	1
32 M2 - 32 m	30 M	30 M	30 M	Cable	33.00 m	30 M	PLC	1	1
32 M2 - 32 m	30 M	30 M	30 M	Cable	46.94 m	30 M	VPS/KLPE Standard	1	1
32 M2 - 32 m	30 M	30 M	30 M	Termination	100.00 m	30 M	Termination ALPE	1	1
PHASE TOPOLOGY P3									
32 M2 - 32 m	30 M	30 M	30 M	Termination	0.00 m	30 M	Termination PLC	1	1
32 M2 - 32 m	30 M	30 M	30 M	Cable	33.00 m	30 M	PLC	1	1
32 M2 - 32 m	30 M	30 M	30 M	Cable	46.94 m	30 M	VPS/KLPE Standard	1	1
32 M2 - 32 m	30 M	30 M	30 M	Termination	100.00 m	30 M	Termination ALPE	1	1

Trend of the selected grid element over all taken PD measurements

SOFTWARE SOLUTION FOR TESTING, DIAGNOSTICS & REPORTING

b2 Suite is an all-in-one computer software. A guided diagnostics process leads the operator through the entire cable testing process that includes VLF testing, TD and PD diagnostics, measurement data analysis and reporting, in real time. At the same time, it ensures the analysis and evaluation of the measured data in an easy-reading and comprehensive way. A fast comparison with past measurements in order to perform reproducible measurements is also available.

YOUR BENEFITS

- Automatic and manual operation modes for VLF testing, TD and PD diagnostics
- Visualization of PD events over the total cable length
- Powerful and comprehensive database
- Definition or recommendation of measuring parameters based on IEEE 400.2, CENELEC HD 620 S2:2010



SIMULTANEOUS PD & TD MEASUREMENT

The parallel measurement of PD and TD results in significant time savings. In addition, it prevents pre-conditioning of the cable which might be caused by the first of two sequential tests. This option is available for b2 Suite v2.0 or higher.



RELIABLE DETECTION OF PD ACTIVITIES

The intelligent algorithms of the software separate valid and invalid PD signals during measurement, in order to precisely locate PD (e.g. in cables, joints, terminations).



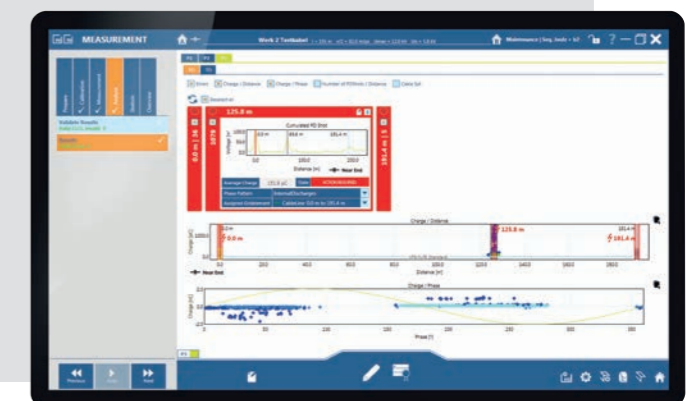
MONITORED WITHSTAND TEST

In combination with TD devices (and PD devices), the b2 Suite v2.0 software provides an additional comprehensive assessment (acc. IEEE 400.2) of your cable system, live.



EASY AND INDIVIDUAL REPORTING

b2 Suite allows both simple and fast as well as individual and comprehensive reporting. Measurement data and additional files are included with the click of a button, allowing completion of measurements including reporting in only 15 minutes.





TRANSFORMER OIL TESTERS



COMPACT AND PORTABLE

BA models are the lightest and the smallest oil testers of their ratings available on the market.



ULTRA-FAST SWITCH-OFF TIME

The use of modern mineral or silicon oils as well as new ester oils makes oil testing increasingly challenging. An ultra-fast switch-off time (<math><5 \mu s</math>) is essential to ensure reliable and reproducible test results.



LOCKABLE ELECTRODE SPACING

Eliminates the possibility of electrode movement during handling or testing. This ensures maximum reproducibility and reliable measurement results of the breakdown voltage.



HIGHEST LEVEL OF RF/EMC SHIELDING IN A RUGGED DESIGN

A metal housing ensures best possible shielding of interfering electromagnetic fields to protect your IT assets. The rugged design also permits usage in tough environments.



BA FAMILY

BA test sets (Breakdown Analyzer test sets) from b2 electronics evaluate the condition of transformer insulating liquids e.g. mineral oils, ester fluids, natural or synthetic, and silicone fluids in a non-destructive way, giving a precise and dependable analysis of the breakdown voltage. The flashover voltage of dielectric oil is determined by taking an oil sample and carrying out a fully-automated oil breakdown test.



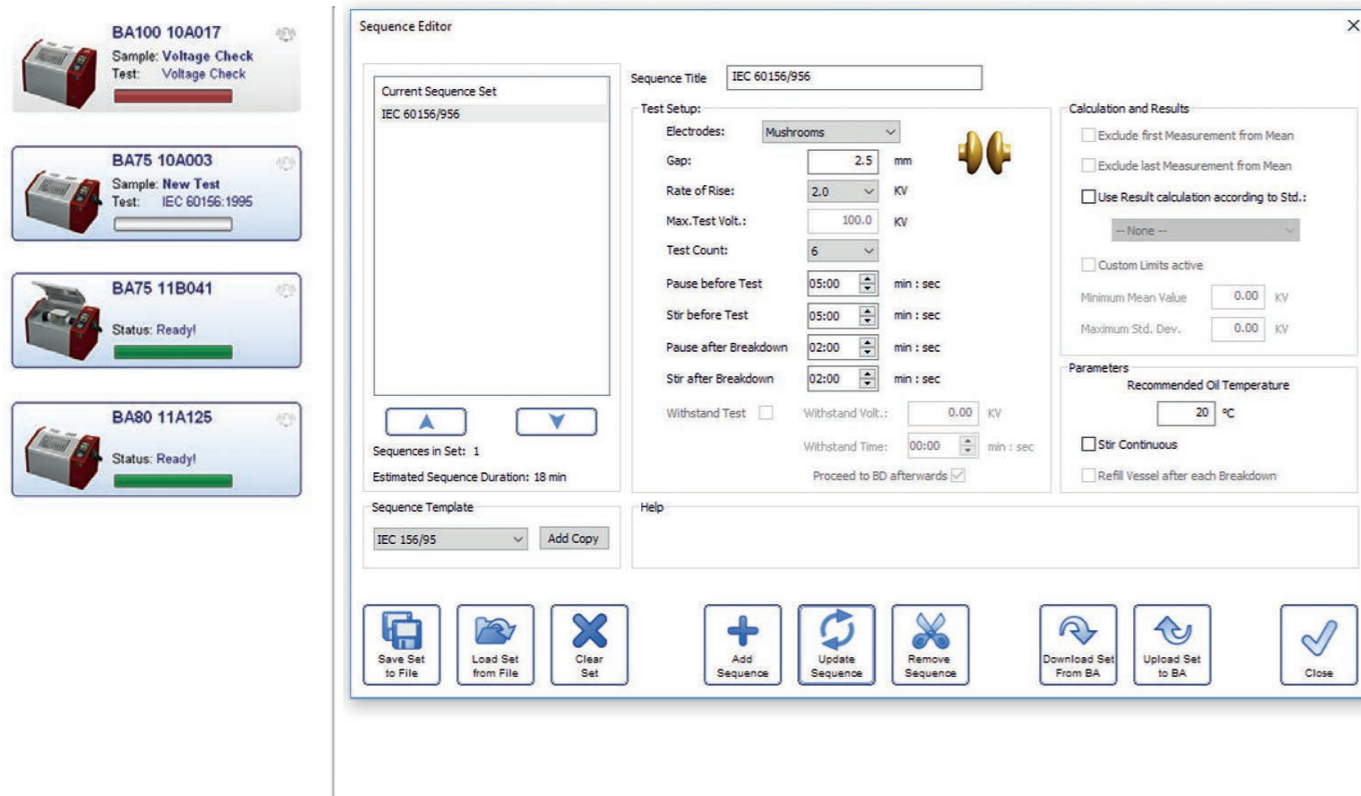
Transport box (optional)



BA100

YOUR BENEFITS

- Portable test set - ideal for both laboratory and on-site testing
- Suitable for mineral oils, ester, natural, synthetic and silicone fluids
- Automatically generated test reports provided via BA ControlCenter software
- Automatic test sequences based on relevant international standards (including IEC 60156:95, ASTM D1816-12, ASTM D877M-13 A/B, etc.)
- Integrated battery for operation at locations where no mains supply is available
- Integrated printer for immediate creation of measurement reports.

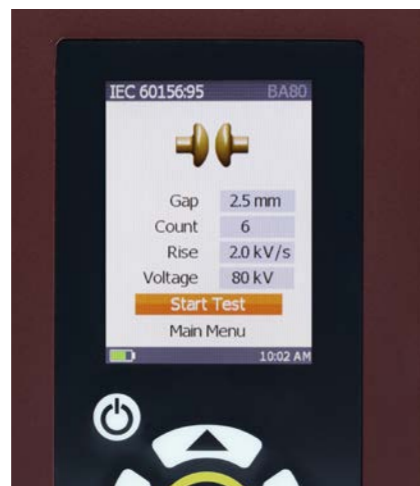


BA CONTROLCENTER SOFTWARE

- Simultaneously manage up to 4 test sets
- Start test sequences remotely from your PC
- Create individual test sequences and upload them to the test set via Bluetooth® or USB flash drive
- Load test reports to the PC via Bluetooth® or USB flash drive (as PDF, XML, TXT, ...)



Transfer results via Bluetooth® or USB flash drive



Very bright and high-contrast color display



Print results

BA FAMILY

BA75 SB5001



BA80 SB5003



Output voltage	up to 75 kV _{rms}	up to 80 kV _{rms}
Voltage rise rate	0.5-10 kV/s	0.5-10 kV/s
Switch-off time on flashover	< 5 μs	< 5 μs
Measurement of oil temperature	0-100 °C	0-100 °C
Printer / Bluetooth® / USB flash drive	● / ● / ●	● / ● / ●
Weight (incl. battery)	22 kg / 48.5 lbs.	22 kg / 48.5 lbs.

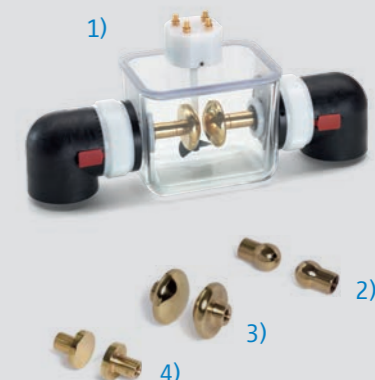
BA100 SB5004



Output voltage	up to 100 kV _{rms}
Voltage rise rate	0.5-10 kV/s
Switch-off time on flashover	< 5 μs
Measurement of oil temperature	0-100 °C
Printer / Bluetooth® / USB flash drive	● / ● / ●
Weight (incl. battery)	32 kg / 70.5 lbs.

Available test vessels

- 1) Test vessel acc. to ASTM D1816 stirrer VDE electrode & gauge
- 2) Test vessel acc. to IEC 60156 sphere electrode incl. gauge
- 3) Test vessel acc. to IEC 60156 mushroom electrode incl. gauge
- 4) Test vessel acc. to ASTM D877 disc electrode incl. gauge



Founded in 2001, b2 electronics is an internationally acting company with the goal to innovate high voltage cable testing. With our solutions we help to prevent damage to electrical energy networks in a safe, fast and cost-efficient way. Customers in more than 120 countries put their trust in us and our systems.

b2 electronics - the right choice!

We are engineers who innovate with passion and a sense of responsibility. Our extensive product portfolio is patent proofed and makes us the market leader for compact and lightweight energy cable test and diagnostics equipment. Our solutions are fully researched, developed and manufactured in-house in Austria.



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