

OLT-80/ OLT-100 AUTOMATIC OIL BREAKDOWN VOLTAGE TESTERS



The **KEP OLT-80 80KV** & **OLT-100 100KV** Series Automatic Oil testers accurately **check breakdown voltage on dielectric liquids** utilized typically in electrical equipment & specifically oil in **transformers**.

Oil suffers from electrical and mechanical stresses and contaminations caused due to chemical interactions with windings, solid insulation and high operating temperature, resulting in the original chemical properties of Oil changing over time rendering it unusable for its intended purpose. The oil must be periodically tested to ascertain if it is suitable for further use, if necessary filtration should be done or if it should be replaced.

OLT Series Oil BDV testers featured are manufactured by Kharkov Energo Pribor, Europe.

KEP Software Suite

- Store Test Results
- Create and save test reports in PDF and TXT files.
- Select standards from pre-defined templates or create custom templates
- Add, remove- modify set of standards stored on device, including creation of customized test sequences
- Software allows firmware update of OLT Testers.
- Provides Calibration reminders.
- Create unique identification for each device.



Pre-Fed Standards :

IEC 60156

ASTMD 1816

ASTMD **877**

& others



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Standards : KEP Oil BDV test kits ensure a **fully automatic test procedure** according to the selected standard and have a built-in printer to print a test report after testing.

Up to 10 Standards such as **IEC 60156, ASTM** etc are **pre-fed** in the instrument to allow operator to **perform test as per standard** selected from system menu.

Clear breakdown based on precise measurement performed directly in HV unit and based on current.

Accuracy : Test voltage is measured directly on electrodes. This fact combined with true sine voltage shape (independent of supply voltage shape), increases repeatability and accuracy of measurements.

Monitoring: OLT-100 is designed beyond simple RBM. OLT Oil BDV tester corrects both rate of change (slew monitoring) of output signal and quality of output sinusoidal signal according to the reference signal.

Test vessel : OLT Oil testers are provided with a test vessel (IEC 60156 – basic configuration) with VDE 0370 mushroom-shape electrodes. The gap between electrodes is easily regulated with a pass- no pass gauge, provided as part of standard supply.

The test vessel is provided with a magnetic stirrer, which stirs the liquid being tested between consecutive measurements.

Zero start interlock: Test will not initiate if voltage is not 0. In addition, device automatically reduces voltage to 0 after any test sequence.

Data storage & print : Built-in printer to print a test report after testing. Test results are saved into the non- volatile memory of the tester. USB Connectivity allows data transfer to PC.

Safety : OLT system will automatically cut off the voltage supply if the tester lid has been opened during the test to ensure a high level of safety to the operator.

Built in sensor: Measure the temperature of oil or insulation liquid with a resolution of 0.1°C. Built in chamber for collecting spilled oil.



Safety and EMC compliance :

Designed in accordance with IEC 61010 safety requirements.
Meets light industrial IEC 61326-1 Class B, CISPR 16-1, CISPR 16-2 and CISPR 22.

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Technical specifications





Oil breakdown voltage testers	OLT-80	OLT-100
Output AC voltage, kV	Symmetrical 0 to 80 _{RMS}	Symmetrical 0 to 100 _{RMS}
Accuracy, kV	± 1	
Resolution, kV	0.1	
Power supply frequency, Hz	50 / 60 ± 1	
Testing Mode	Automatic	
Switch-off time at flash over, µs	<5	
Oil temperature measurement range, °C	- 10 to + 99	
Temperature measurement resolution, °C	0.1	
Standards (user selectable & custom)	Up to 10 pre-set standards including:	IEC 60156 GOST6581 ASTM D877 ASTM D1816 IP 295 other standards – on request
Electrodes	Default	«mushroom» IEC 60156
	Options	«sphere» IEC 60156; «plane» ASTM D877, ASTM D1816 – on request
Protection	IP32	
Trip Current mA	1.5	
Display	monochrome, 128 x 64	
Interface language	English	
Nonvolatile memory capacity, test reports	512	
PC connectivity	USB-B	
Printer	thermal printer, 57 mm standard paper	
Power supply voltage, V	190V to 245V (47 Hz ... 63 Hz)	
Power consumption, kV•A, max	<100	
Weight, kg, max	21	30
Dimensions, W x H x D, mm, max	461 x 280 x 271	530 x 315 x 320
Ambient operation temperature, °C	- 10 to + 60	
Ambient storage temperature, °C	- 20 to + 60	
Relative air humidity	Non condensing	
Atmospheric pressure, mm Hg	630 to 800	

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Supply Includes:

OLT oil tester	OLT -80 / OLT-100
Test vessel, 400 ml	1
Go/No-Go gauge, 2.5mm	1
Magnetic stirrer	1
Lifting stick for magnetic stirrer	1
Power cord (C-type plug)	1
Grounding cable	1
USB cable (A-B type)	1
Software on USB flash-drive	1
Fuses (250V/3A)	2
Cover	1

Optional:

Test vessel	
	«sphere» IEC 60156
	«mushroom» IEC 60156
	«plane» ASTM D877
	«mushroom» ASTM D1816
Go/No-Go gauge, mm	1 / 2 / 2.5
Oil tester calibrator	C-80/C-100
Paper roll	
Transportation case	
ISO/IEC 17025 calibration certificate	

Calibrator cells are optionally available on request.

CALIBRATION OF C-SERIES CELLS



Automated calibration

Calibration wizard build into KEP Suite makes the process of c-series cell calibration and adjustment fast and easy.



Adjustment settings storage

KEP Suite automatically backs up adjustment parameters when a new adjustment is performed, allowing to roll the settings back should the adjustment process fail or get interrupted.



Oil tester calibrator C -80 : for OLT-80



Oil tester calibrator C-100 : for OLT-100

Designed & manufactured by Kharkov Energo Pribor (KEP), with its facilities in Ukraine, Europe & U.K ; KharkovEnergoPribor Ltd. is a leading manufacturer of high voltage electrical test equipment and devices, cable and calibration test vans, with systems having been supplied across 25 countries.

ACL Stanlay is the exclusive distributor of K.E.P, Europe for the Indian market, providing sales , training & after sales service & warranty backup for K.E.P Range.