













Application

Oil testers are used for testing dielectric liquids with their breakdown voltage measuring. A-series of oil testers works automatically, according with selected standard, which are preloaded.

Description

Both A and M series of oil testers bring out accurate and repeatable results of measured breakdown voltage. Fast high-voltage switch off time makes it possible to carry out test of dielectric liquids, which are easily destroyed under such influences.

The internal design of oil testers combined with a use of automatic high voltage breakers, cutting off supplied voltage if tester's lid has been opened during the test, provide operator with high level of safety.

Testers are fully equipped and are ready for operation right after unpacking. They come with a test vessel (IEC 60156 – basic configuration) with VDE 0370 mushroom-shape electrodes. A gap between electrodes is easily regulated with a use of pass-no pass gauge, which comes in pack.

A-series provides with fully automatic test procedure according to selected standard (basically IEC 60156 and GOST 6581 settings are preloaded). It has a built-in printer which is able to print a test report after procedure is done. Test results are saved into non-volatile memory of oil tester. A PC-connectivity makes it easy to collect data from oil tester, save and store them as well as print a fulfilled report. Test voltage is being measured directly on electrodes. This fact combined with a true sine voltage shape (independent from supply voltage shape), increases repeatability and accuracy of measurements.

M-series provides operator with ultra-simplicity of operation. It doesn't require any presets. All you need is pressing start button after a test vessel is loaded. Tester will show a breakdown voltage result immediately after breakdown occurs.

Test vessel for this series goes with magnetic stirrer, which stirs a liquid between two measurements.



Technical specifications

Parameter	A-Series	M-Series
Output AC voltage (symmetrical), OLT-80 / OLT-90 / OLT-100, kV RMS	80 / 90 / 100	
Voltage resolution, kV	0.1	
Measurement uncertainty	3 % of reading	3 % of FS
Output voltage rise rate, kV/s	2 ± 0.2 – basic (changes according to selected standard)	2 ± 0.2
Switch-off time on breakdown, μs	< 5	
Temperature measuring range, °C	5.0 – 50.0	N/A
Programmed test sequences	IEC 60156 (BS EN 60156, CEI EN 60156, NF EN 60156, UNE EN 60156, SABS EN 60156, PA SEV EN 60156) GOST 6581, ASTM D877 & ASTM D1816 (optional)	N/A
Electrodes	"mushroom" type IEC 60156 – basic; ASTM D877, ASTM D1816 (optional)	
Test vessel	IEC 60156, 400 ml, 1.0 kg	
Go/No-Go gauge width, mm	2.45 / 2.55 – basic; 1, 2, 2.5, 4 (optional)	
Display resolution	128 × 64 dot matrix, monochrome with backlight	3×7 -segment digits
Interface languages	English, Russian	N/A
Printer	thermal line, 8 dots/mm, 384 dots/line	N/A
Memory for results, cells	512	N/A
PC connectivity	USB B-type	N/A
Input voltage, V	$230 \pm 10\%$ (basic), 110/120 – on request	230 ± 10%
Frequency, Hz	50 / 60 ± 1	50 ± 1
Power consumption OLT-80 / OLT-90 / OLT-100, VA, max	100 / 120 / 140	
OLT-80 dimensions (W \times H \times D), mm	461 × 280 × 271	471 × 280 × 271
OLT-90 dimensions (W \times H \times D), mm	520 × 300 × 320	500 × 300 × 320
OLT-100 dimensions (W \times H \times D), mm	530 × 315 × 320	540 × 315 × 320
Net weight OLT-80 / OLT-90 / OLT-100, kg	21 / 25 / 30	23 / 27 / 32

► 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.



OLT-80A in comparison with OLT-100A





A-Series: OLT-80A, OLT-90A, OLT-100A



M-Series: OLT-80M, OLT-90M, OLT-100M

Package contents

Commonant	Quantity	
Component	A-series	M-series
OLT oil tester	1	1
Test vessel* IEC 60156 with electrodes and cover	1	1
Go/No-Go gauge	1	1
Magnetic stirrer	1	N/A
Lifting stick for magnetic stirrer	1	N/A
USB cable (A-B type)	1	N/A
Power cord (C-type plug.)	1	1
Grounding cable	1	1
Software on USB flash-drive	1	N/A
Fuses (250V/3A)	2	2
Paper roll (inside the printer)	1	N/A
User's manual	1	1
ISO/IEC 17025 calibration certificate (optional, on Customer's request)	1	1
C-80 (C-100) calibration kit (optional)	1	1

^{* -} Addititional test vessels are avaible on request



A-Series built-in printer





Go/No-Go gauge

Lifting stick



Test vessel (mushroom-type electrodes)



Test vessel (cylinder-type electrodes, optional)



Test vessel (sphere-type electrodes, optional)