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## OTS-60DS/80DS/100DS

### Digital Oil Insulation Test Set



Motwane offers a wide range of Oil Breakdown Voltage test kits to check dielectric strength of insulating oil used in Transformers, Capacitors, Switchgears and Instrument Transformer for safe operation and maintenance. OTS-DS series is meeting to national & international standards for conducting BDV Test. It is also facilitated with Zero Start Interlock and Earth Open Interlock for safety and avoid hazards. Also equipped with LED (Digital Display) along with Hold Facility. Designed with unmatched quality and improved reliability and safety having earth & zero start, safety door interlock ensuring high degree of protection. OTS comes with two variants models- OTS-A series - a pre-programmed fully Automatic Oil BDV kit and OTS-DS Series - Motorized with Digital Display.

## Features

- ✓ Fully Automatic Microprocessor based
- ✓ Pre-programmed International Test Standards
- ✓ Customized Test Sequences
- ✓ Voltage Slew Monitoring: Real Breakdown Monitoring (RBM)
- ✓ Upgraded Sequence as per IEC60156-2018
- ✓ Suitable to test Mineral, Ester & Synthetic Oil
- ✓ Internal Memory up to 100 Test
- ✓ USB Interface
- ✓ Inbuilt Thermal Printer
- ✓ Voltage Checker for onsite Calibration (Optional Accessories)
- ✓ Bluetooth enabled for Motware Mobile App

## Applications

Transformer oil is used as insulating medium in transformer, switchgear and other electrical apparatuses and it also acts as coolant to dissipate heat of the transformer. In addition to these, Insulating Oil serves other purposes like it helps to preserve the core and winding as these are fully immersed inside oil and another important purpose of insulating oil is, it prevents direct contact of atmospheric oxygen with cellulose made of paper insulation used in windings, which is susceptible to oxidation. When insulating oil deteriorates due to aging / contamination which leads to catastrophic event due to flash over in insulation. The voltage withstands capability of oil which often is reduced (which often reduces) to contamination like dirt, water ingress and foreign particles.

### OTS-DS series useful for Oil Testing in following equipment's

- Power and Distribution Transformer
- Bushing
- Instrument Transformer
- Switchgear
- Capacitors

## Technical Details

### OTS-60DS/80DS/100DS

#### Technical Specification

<b>Mains Supply</b>	110V/230VAC $\pm 10\%$ 50/60Hz Single Phase
<b>Output Voltage</b>	0 - 100kV (OTS - 100DS) 0 - 80kV (OTS - 80DS) 0 - 60kV (OTS - 60DS)
<b>Voltage Accuracy</b>	$\pm 1\% \pm 1kV$
<b>Voltage Resolution</b>	0.1kV
<b>Voltage Rise Rate</b>	2kV/sec
<b>Trip Time</b>	Less than 1ms.
<b>Tripping Current</b>	$\leq 10mA$
<b>Standards</b>	complying IEC 60156, IS6792
<b>Display</b>	3 ½ digit LED digital Earth Open Interlocking
<b>Protection</b>	Zero Start Interlock Safety Door Interlock Earth Open Interlock Overload Protection
<b>Operating Temperature</b>	0°C to 55°C, <90% RH, Non condensing
<b>Storage Temperature</b>	-10°C to 55°C
<b>Dimension</b>	655mm(L) X 325mm(W) X 385mm(H)
<b>Weight</b>	$\leq 40kg$
<b>Test Standard</b>	As per IEC 60156, 5 Min Test, ASTM D1816, ASTM D877, IS 6792, BS 5730A, BS 5874, BS 148, UNE 21, NFC 27, OCT 6581, AS 1767, IP 295, STAS 286, VDE 0370, CE 1344, SABS 555, STA 8286, With stand A, With stand B, Custom, BS5730, Manual Test.

## Accessories

### Standard

■ Oil Cup Assembly (Domestic))	: 1 Set
■ Instrument Carrying Case With Foam For OTS	: 1 No.
■ Carrying Bag With Foam For OTS Accessories	: 1 No.
■ GO NO GO Gauge 2.5MM SS	: 1 No.
■ Pointer For Oil Cup OTS-100/80DS/60DS	: 1 No.
■ Spanner For Electrode Setting 12/13 FOR OTS-DS	: 1 No.
■ Fuse 5A 250V Slow Blow Unleaded Glass Dimension - 5 X 20 MM	: 1 No.
■ Mains Cord Straight, LENGTH=3.0MTR	: 1 No.
■ Test Lead For Earth OTS-100	: 1 No.
■ Instruction Manual	: 1 No.

### Optional

- Voltage Checker
- Bluetooth enabled & Motware Mobile App



**Fig. 1 : Vernier based Oil Test Cell**