

# Automatic Oil BDV Test Set AOBDV 100



Oil has been used for a long time as an insulating medium in Transformers, HV Capacitors, XLPE Cables and Switchgear. It is also an effective coolant transfer medium of various impurities from windings and paper insulation. It is necessary for oil to be perfect insulator as it was intended to be at the time of manufacture, for the HV equipment to function satisfactorily. But oil suffers from electrical degradation due to the contamination and other electrical and mechanical stresses, rendering its properties ineffective for voltage at power frequency at which it is likely to cause a flash over.

Beacon Automatic Oil Break down Kit is highly precise instrument, which can be used to conduct either a breakdown voltage test or do a proof (withstand) test. Usual available automatic test sets only perform the former function, but our machine can do both.

## Salient Features

- Automatic BDV Kits available in ratings 100KV, 80KV and 60KV.
- Measures HV secondary voltage across oil vessel electrodes, instead of across HV primary.
- User friendly with operations selection.
- Accurate Testing Instrument with accuracy 0.01KV resolution.
- Programmable Stand, stir and intermediate stand times from 0-99min.
- Programmable voltage ramp rate from 0.5KV/sec to 5KV/sec to meet requirement of all regional standards.
- Proof test possible with 5 break sequences.
- Repetitive test sequence up to 99 iterations and average readings (from first to last).
- Non – Contact magnetic Stirring.
- Touch panel, Backlit big LCD screen for comfortable user interface.
- Integrated Matrix Printer.
- Internal memory for 100 test data storage and recall via USB port.
- Included IEC 60156, ASTM D877, ASTM D1816, UNE 21, BS 148, BS 5874, VDE 0370, NFC27, CE1344, OCT 6581, SABS 555, AS 1767, STA 8286, IP 295 and all other international standard test sequence.
- Programmable 10 custom test sequences.
- High Voltage 100KV digital meter 1% accuracy available.

# Automatic Oil BDV Test Set

## AOBDV 100

### Technical Specification

#### Power Used for Input/Output:

1. Power Supply : Single Phase AC 100V to 260V, 50 Hz  $\pm$  5%
2. Voltage Output : 100 kV
3. BDV Accuracy : 1%
4. BDV Resolutions : 0.01 KV (10V).
5. Voltage Slew Monitoring: Real Breakdown Monitoring (RBM)

#### Programmable Functions & Parameters:

1. Stand Time : 0 – 99 mins
2. Stirring Time : 0 – 99 mins
3. Intermediate Stand Time: 0 – 99 mins
4. Voltage Ramp up : 0.5KV/Sec to 5KV/Sec
5. Trip Current : 5 to 20mA, 1mA Step
6. Sequence Repetition : 1 to 99 Times
7. Switch off time : 1  $\mu$ s
8. Temp. Measuring Range : Oil Temp. 10°C to 65°C

#### Safety System:

1. Interlock for Zero Start
2. Interlock for HT cover open
3. Auto Trip and Reset

Operation Temperature	:	-10 °C to + 60 °C
Storage Temperature	:	-20 °C to + 60 °C
Humidity	:	90% Non – Condensing
Size	:	470 mm(W) x 490 mm(D) x 450 mm(H)
Gross Weight	:	49 Kgs. Including Accessories
Degree of Protection	:	IP32
Safety Standard	:	As per IEC 61010

#### Standard Accessories:

- Oil vessel with Mushroom Electrodes – 1set  
Or
- Oil vessel with Spherical Electrodes – 1set  
Or
- Oil vessel with Cylindrical Electrodes – 1set
- Go – On – Go gauge (As per Choice of oil vessel) – 1 No.
- Connecting Ac main cable – 1 No.
- Loaded Printer Roll
- User Manual – 1 No.
- Test Certificate – 1 No.
- Warranty Certificate – 1 No.

*Images shown are indicative. Actual equipment may differ in color and shape from the one shown.*