

### Insulating Oil Dielectric Breakdown Voltage Tester



#### Application

In all power and distribution transformers, switchgears, load changers, cables and circuit breakers etc., transformer oil or other insulating oils are very important ingredient and used insulation liquid should have a very high dielectric strength. To test the dielectric strength of insulation liquid, we developed Automatic Insulating Oil Dielectric Breakdown Voltage Strength Tester(DST), which is completely self-contained, compact and portable set. The set has been specially designed for testing the dielectric breakdown voltage strength of insulating liquids, a very high

voltage is passed through it. The failure of the dielectric strength is shown by a spark across two electrodes. The apparatus to carry out this test is manufactured by us in various voltage ranges and models, as per IEC-156 and ASTM(Optional).

#### Features:

1. As per specification of standard of IEC 156, ASTM D 877 and ASTM D 1816 (ASTM are option)
2. Automatic self-test with HV output voltage testing variation of 0-80KV or 0-100KV.
3. Built-in measurement of the temperature of the insulating liquid.
4. LCD display to rest test results and built-in printer to print out of test results automatically.
5. Capability of storing 100 experimental results, displaying the current temperature.
6. At a constant speed controlled by single chip microcomputer.
7. Easy to operate, small size, light weight.



#### Technical Specifications

1. Power supply: AC220V  $\pm$ 10%, 50 HZ
2. Voltage output: 0-80KV / 100K
3. Accuracy:  $\pm$ 2%

- 4.Capacity:1.6KVA, 2.0KVA
- 5.Pressure increase rate : About 2 KVA/S
- 6.Pressure testing speed: 2%
- 7.Break down sensitivity : <2KV
- 8.Wave form distortion :≤3%
- 9.Time of breakdown: ≤10ms
- 10.Operational environment: Temperature:0°C-40°C,  
Humidity: the most relative humidity85%
11. Storage environment : Temperature:-20°C-40°C,  
Humidity: the most relative humidity75%.
12. Operational height: <150m (can be specially designed if the  
height is over 1500m)
13. Test cell: Glass, volume 300 to 500 ml, with protective cover and stirrer.
14. Electrodes: Stainless steel spherical 36 mm diameter/hemispherical 25 mm radius, 2.5 mm gap as per IEC-156,  
or ASTM D 877 and ASTM D 1816 (ASTM standard are option)
- 15.Initial stand time of oil sample: 180 seconds  
Intermediate stand time of oil sample: 60 seconds  
String time of oil sample: 60 seconds  
Number of consecutive test: 6
16. 80KV: Weight: 50kg Dimension: 450\*450\*450 mm  
  
100KV: Weight: 55kg Dimension: 480\*480\*480 mm