



OBV-80B

80 kV Automatic Oil Dielectric Tester



Breakdown Voltage Testing, Fully Automatic.

A microprocessor-controlled tester for the dielectric breakdown voltage of insulating oil, with an output of 0 to 80 kV from a 1.5 kVA step-up transformer.

Test programmes to IEC 156, ASTM D877 and ASTM D1816 are built in, together with a user method that sets wait time, pause, stirring, maximum test voltage and the number of breakdowns. The tester raises the voltage, records each breakdown and calculates the average automatically, and a manual mode lets the operator raise and stop the voltage from the keypad. High-voltage end sampling passes the test value straight to the analogue-to-digital converter for accurate results.

The test cell is cast in one piece from special glass to prevent oil leakage. A large LCD shows the date, time, temperature and humidity alongside the test parameters, and the built-in printer records each result. Over-current, over-voltage and short-circuit protection are built in, and the portable case suits use indoors and on site.

KEY FEATURES

- 0 to 80 kV output · 1.5 kVA step-up transformer
- IEC 156, ASTM D877 and ASTM D1816 methods, plus a user method
- Five rates of rise: 0.5, 1, 2, 3 and 5 kV/s
- Voltage accuracy $\pm(3\%$ of reading + 2 digits)
- 1 to 6 breakdowns per test, averaged automatically
- Built-in printer · temperature and humidity sensor

IDEAL FOR

- Transformer test stations
- Power distribution and transmission
- Railway systems
- Power plant maintenance

TECHNICAL SPECIFICATIONS

OBV-80B 80 kV Automatic Oil Dielectric Tester	
Output Voltage	0 to 80 kV
Step-up Transformer	1.5 kVA capacity
Rate of Voltage Rise	0.5, 1, 2, 3 and 5 kV/s, selected by switch
Voltage Accuracy	±(3% of reading + 2 digits)
Supply Distortion	<1%
Test Methods	IEC 156 · ASTM D877 · ASTM D1816 · user method · manual
User Method	Wait time 1 to 15 min · pause 1 to 10 min · stir 5 to 90 s in 5 s steps · maximum test voltage 10 to 80 kV in 10 kV steps · 1 to 6 breakdowns
Maximum Test Voltage	If no breakdown occurs at the set maximum, the voltage is held for 50 s
Results	Each breakdown voltage and the average, calculated automatically
Electrode Gap	2.5 mm standard, set with the master gauge supplied
Test Cell	Special glass, cast in one piece
Display	Large LCD · date, time, operating parameters, results and menus
Environment Sensing	Temperature (°C) and relative humidity shown on the display
Printer	Built in · prints single results and averages
Protection	Over-current, over-voltage and short-circuit · alarm if the earth is not connected
Power Supply	220 V AC ±10% · 50/60 Hz ±5 Hz · <200 W



WHAT'S IN THE BOX

- OBV-80B main unit · test cell
- Power lead · master gauge for the electrode gap
- Stirring paddles (2) · tweezers
- Spare fuses, 3 A (2) · roll of printer paper
- Operation manual · warranty card · certificate

USE · Indoors and on site, away from rain, corrosive gas, heavy dust, high temperature and direct sun
POWER · 220 V AC ±10%, 50/60 Hz ±5 Hz, <200 W

GENERAL SPECIFICATIONS

Code	Item	Part Number
OBV-80B	80 kV Automatic Oil Dielectric Tester, 1.5 kVA, built-in printer	800080

Please contact us for pricing and availability.

MASS

29 kg

OPERATING

0°C to 40°C · relative humidity ≤85%

WARRANTY

1 year (subject to product registration)

DIMENSIONS

409 × 393 × 388 mm

ELECTRODE GAP

2.5 mm standard · master gauge supplied

STANDARDS

Test methods to IEC 156, ASTM D877 and ASTM D1816