

DIELECTRIC BREAKDOWN VOLTAGE OF INSULATING OILS

Test Method

The majority of high-voltage transformers, cables, switchgears, transducers, capacitors, and rectifiers use insulating oils for insulating electrically live parts and to carry off thermal energy. The quality of the insulating oil must be checked at regular intervals to ensure a long equipment service life. The most important requirement of an insulating oil is a high dielectric strength. Determination of the dielectric breakdown voltage of insulating oils provides an early detection method for any reduction in the insulating properties.

Automatic Portable Dielectric Breakdown Tester

- Conforms to ASTM D877, D1816 and related test specifications
- Output voltage: 75kV
- Features 2.8" ultra bright color display for optimal readability and mobility
- Built-in printer offers direct evaluation and reporting of results
- Internal battery, external 12V power supply
- Automatic Vernier function for electrode gap spacing
- Measurement of Silicone based oils
- Internal temperature measurement of oil sample
- Bluetooth PC Connectivity and USB Flashdrive Capability

Specifications

Conforms to the specifications of:

ASTM D877, D1816; BS EN 60156; CEI EN 60156; IEC 156; VDE 0370 Pt. 5

Output Voltage: Up to 75kV rms symmetrical

Voltage measurement accuracy: 0 - 75kV \pm 1kV

Voltage slew rate: 0.5 - 10kV/s

Resolution (displayed): 0.1kV

Power Supply: 85V - 264V, 47Hz - 63Hz, 12V external supply CE

Power consumption: 60VA

Internal rechargeable battery: 1 x 12V / 7.2Ah

Switch-off time on flashover: < 5 μ s

Measurement of oil temperature: 0 - 100°C / 32 - 212°F

Temperature Resolution: 1°C / 1.8°F

Display: 2.8" color (ultra bright)

Selectable Programs: ASTM D1816-04-1mm, ASTM D1816-04-2mm,

ASTM D877-02A, ASTM D877-02B, IEC 156/95

Customer-specific programs: Unlimited

PC Software: Included

Printer: Dot Matrix Hard Copy Output

Interface: Bluetooth

USB: USB memory stick

Operating Temperature: -5°C - 45°C (23°F - 113°F)

Storage Temperature: -20°C - 60°C (-4°F)

Included Accessories

Calibration Sheet	AC Power Cable	Integrated Battery
User Manual	PC Software	Integrated Printer



K16175 Automatic Portable Dielectric Tester

Dimensions WxHxD, in.(cm)

16.9x11x9.85 (43x28x25)

Net Weight: 48.5 lbs (22kg)

Shipping Information

Shipping Weight: 54.5 lbs (24.7kg)

Dimensions: 25x21x19in. (63.5x53.4x48.3cm)

Ordering Information

Catalog No.

K16175 Automatic Dielectric Breakdown Tester, 0-75kVAC, 100-240V 50/60Hz

Accessories

K16175-4	Transport Case
K16175-5	Test Vessel complete with electrodes for ASTM D1816
K16175-6	Test Vessel complete with electrodes for ASTM D877
K16175-23	IEC156 Test Cell with VDE Electrode
K16175-24	IEC156 Test Cell with Sphere Electrode
K16175-12	Spacer Gauge, 1mm
K16175-13	Spacer Gauge, 2mm
K16175-14	Spacer Gauge, 2.5mm