

OT-90

Insulating oil testing



Dielectric strength tests up to 90 kV to IEC 60156, with automatic statistics

OT-90

Oil breakdown voltage test set

amperis

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Breakdown voltage testing of mineral and synthetic insulating oils, in the laboratory and in the field.

Product overview



The test set closed, ready for transport

Dielectric strength under control

The OT-90 measures the breakdown voltage of insulating liquids in accordance with IEC 60156, with test voltages of 10 to 90 kV on the electrodes. It serves the laboratories of companies that manufacture, operate or service transformers, oil circuit breakers, instrument transformers and capacitors, and handles mineral and synthetic oils with the same standardised procedure.

A fully programmable test cycle

The operator sets the test voltage value, the voltage rise rate, the test time and the mixing time of the sample. The set raises the voltage at 2 kV/s, measures it with a 3% accuracy, disconnects at the instant of breakdown and repeats the sequence, delivering the mean of the measurements and the standard deviation without any manual calculation. The mushroom-profile electrodes with a 25 mm radius follow the guidelines of the standard.

Main features

- Test voltage from 10 to 90 kV; rise rate of 2 kV/s.
- Testing to IEC 60156 of mineral and synthetic oils.
- Safety interlock: no voltage can be applied with the cover open.
- Ergonomic design for the correct execution of the procedure.
- Internal battery for up to 8 hours of autonomous operation.
- Bluetooth link and built-in thermal printer.



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Software and reporting



Control panel with display and programming keys

Remote control from a computer

Over the Bluetooth link, the OT-90 is operated from a computer with the remote-control software: tests are started and supervised from the desk, the results of each sample are stored and the reports are printed, so the laboratory archive is built without transcribing tickets by hand.

Documented results in the field

The built-in thermal printer issues the test ticket on the spot, and the internal battery keeps the set running for up to 8 hours, which allows complete, documented test sessions at installations without a mains supply.

Statistics calculated by the set

At the end of the sequence the instrument computes the mean value of the measurements and the standard deviation, the two figures with which IEC 60156 characterises the dielectric strength of the sample.



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OT-90 – MEASUREMENT DATA

Test voltage on the electrodes	10 to 90 kV
Voltage rise rate	2 kV/s
Voltage measurement accuracy	3%
Test standard	IEC 60156
Test electrodes	Mushroom profile, 25 mm radius, per the standard
Programmable parameters	Test voltage value, voltage rise rate, test time, mixing time
Result processing	Automatic mean of the measurements and standard deviation
Oils under test	Mineral and synthetic



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OT-90 – TECHNICAL SPECIFICATIONS

Power supply	230 V (50±2 Hz)
Internal battery	Up to 8 h of autonomous operation
Power consumption	0.5 kW
Communication	Bluetooth connector for the computer link
Documentation	Built-in thermal printer; PC software with result storage and reports
Safety	Interlock preventing power connection with the cover open
Operating temperature	0 to +35 °C
Relative humidity	Below 80%
Dimensions	520 × 335 × 320 mm
Weight	35 kg



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