Winding and coil insulation diagnostics

onsite HIGH VOLTAGE

IT30

Insulation tester
Oscillating test up to 30 kV_{peak}

realDAC® HIGH VOLTAGE

Efficient, integrated diagnostics, comprehensive results

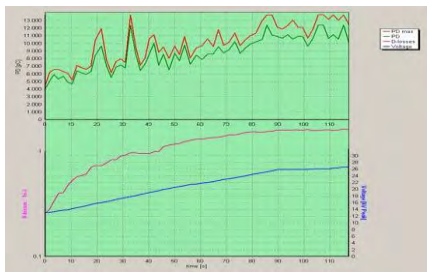
- ✓ Powerful PD monitored DAC voltage withstand testing
- ✓ Highly sensitive PD measurement and diagnosis, according to IEC60270
- ✓ Fully integrated dissipation factor measurement at DAC voltages
- ✓ Easy WIFI based automatic PD range calibration: from 1 pC up to 150 000 pC
- ✓ Compact and lightweight, single unit solution
- ✓ Extended temperature range, industrial grade controller
- ✓ All in one off-line testing and diagnosis of high voltage motors and generators

The inventor of realDAC®

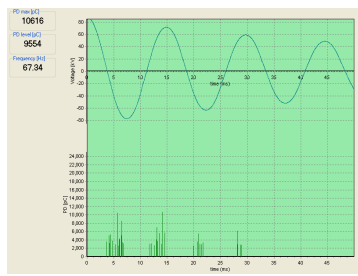
Technical Data IT30

Max. output voltage	0.9 … 30 kV_{peak}, 21.2 kV_{rms} Precision +/- 1 % Resolution 0.1 kV
Coil inductance	app. 1.4 Henry*
Frequency range damped AC	20 Hz … 800 Hz
DAC Test object capacitance range	30nF …10 µF at 30 kV
Max oscillating current	600 A
PD measuring range	1 pC … 150 nC
PD measuring bandwidth	Acc. to IEC 60270
PD measuring accuracy	1 pC
Dissipation factor estimation range	1 x 10^{-3} … 10 x 10^{-2}
System software	User selectable graphical interface, integrated measurement Database
Power supply	Singe phase AC 110 … 240 V, 48 … 63 Hz, 550 VA
Operation temperature	- 25 °C … + 65 °C non-condensing
Net weight	approx. 86 kg
Dimension	Ø 610 x H 870 mm

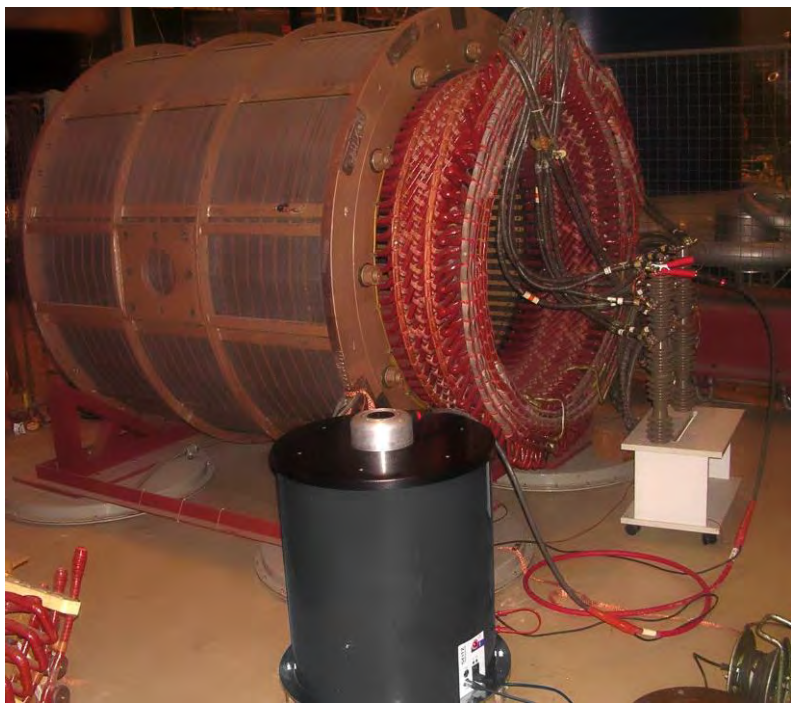
improvements to specifications are subject to change without notice, * other values on request



PD in relation to measurement time



Phase Resolved Partial Discharge (PRPD)



Applications

- off-line diagnostics on high voltage motors and generators
- PD monitored withstand test by applying DAC voltage excitations up to 30 kV_{peak}
- Comprehensive PD measurement capabilities according to IEC 60270
- Extended diagnosis with tip-up Tan δ values at DAC voltages

Features

- Modular compact DAC system
- Measurement of PD level, PD inception and PD extinction voltage
- Phase resolved PD analysis
- Wireless controlled calibrator, simple, fast TD calibration
- Graphical user interface, user can select the preferred data view

onsite high voltage group
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