

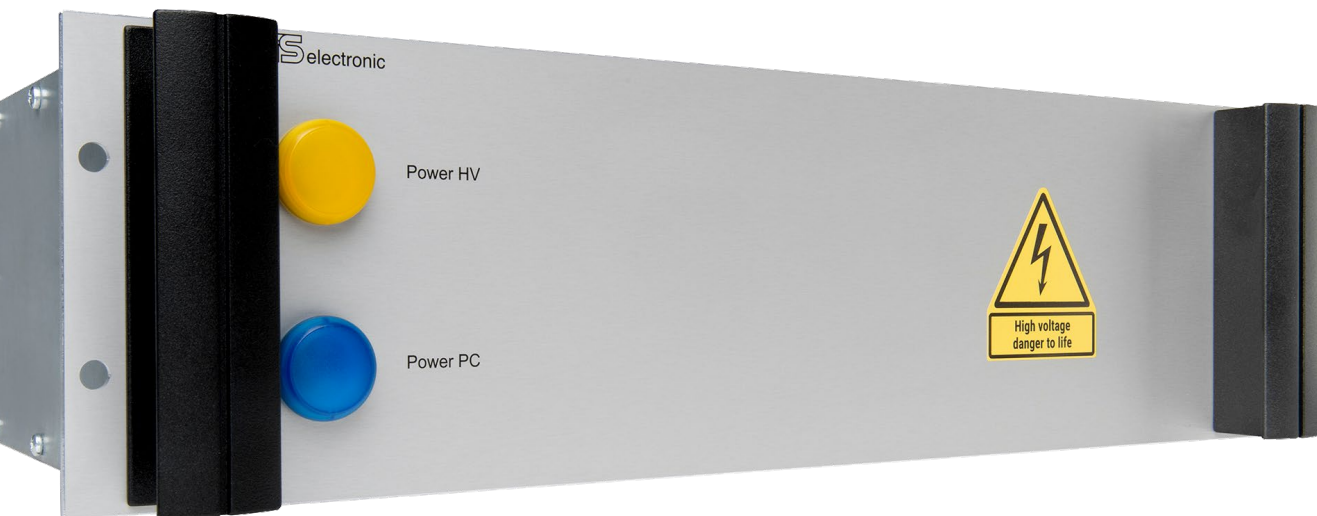
Surge Tester

ST 3820K

The combined surge and partial discharge tester ST 3820K was specially developed for integration into automatic test systems and for use in the laboratory. It is ideal for detecting interturn faults and insulation faults within a winding even before the fault affects the electrical specifications of the DUT.

Thanks to the extremely steep voltage rise slope and the various surge capacities available as an option, the ST 3820K is ideally suited for both conventional winding goods (e.g. wound stators) and winding goods in the e-mobility sector (e.g. hairpin stators).

Thanks to the combination of surge generator and partial discharge Measurement Technology, the ST 3820K provides you with a compact complete solution for insulation testing of winding materials.



Surge Tester

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		Rack device
Surge test	Voltage Surge Capacity	100 V - 6000 V 18 nF (optional: 40 nF, 100 nF (other capacities on request))
Partial discharge test	Voltage Measurement Measurement Method	100 V - 6000 V according to IEC 61934
High Voltage Test DC	Voltage Range	100 V - 6000 V / 10 mA
Insulation Measurement DC	Measuring Range	100 V - 6000 V, 10 GΩ / kV
Internal Matrix		L, N + PE
Evaluation Process	Surge evaluation Defective Area Differential Area nF Tolerance Band	Automatic Evaluation (partial discharge) Limit value partial discharge PDIV, RPDIV inception voltage PDEV, RPDEV extinction voltage
Input HF	PD-Channel	TNC Socket 50 Ω impedance ± 1.5 V peak
Measurement HF	Frequency Range Sensitivity (approx.) Damping in the Stop Band Memory	1 GHz - 2 GHz -90 - -30 dBm 120 dB 256 mb
Measurement Technology	Sampling Rate Resolution Number of Master Curves Recording Duration	250 MHz 12 Bit / 4 ns Unlimited 1 μs to 160 ms
General Data	Error Message PC Software Software Interface Mains Supply	Visual and audible DAT DLL 115 V / 60 Hz 230 V / 50 Hz
Interfaces	Computer Interfaces	Ethernet / LAN
Operation		Remote only
Dimensions and Weight (approx.)	Height Width Depth Weight	133 mm 5.2 in 483 mm 17.0 in 489 mm 19.3 in 17,5 kg 38.6 lbs