CAPACITOR DISCHARGE TEST SETUP

HCS 3-30

Loading voltage
3 KV

Current ampllitude
2 x 15 KA

optical impulse trigger

The surge current test setup is used for HCS3-30 surge current testing of capacitor windings. The tested capacitor is an adjustable voltage, 0.05 - 3000 V charged and then discharged through a triggerable switch.

The capacitor discharge test setup essentially consists of an electronically controlled high-voltage charger (additonal device), a high voltage triggerable switch trigger pulse amplifier and a current measuring device.

Technical specification HCS 3-30

max. allowable charging voltage		3.0 kV ± 2%
Optical-interface for remote control of the HV loading device		build-in
Polarity of the charging voltage		positive
Loading resistor	15 * 10Ω - 65W	build in
Max. current amplitude, for one switch		max. 15 kA
Max. current amplitude, for both switches in parallel		max. 30 kA
Max. charging transfer over the switch		2.0 As
Impulse current resistor for detecting the discharge current		2 * 1 mΩ, 15 kA
Impulse output:	High current connectors, at the rear site	

Attention! The high current outputs an not touch proof isolated! The device may be operated only in installed condition, where the high current outputs are touch proof covered and protected against touch!

Impulse trigger:	0/10V, optical converter, light guide input	build in
Ignition booster:	appr. 6 * 2.5A/0.5A, 100µs	build in
High current switch	2 * 3 Thyristors	build in
Power supply		230 V / 50-60 Hz

Dimension HCS :	19"- case (7HE) W*H*D	553*470*600 mm^3
Wight		35kg
Dimension HV loading device:	19"- case (3HE) W*H*D	553*133*450 mm^3
Wight		13kg

The control of HCS 3 and the HV loading device is not included in this test set up.

Because it is not possible to build in a pulse current limiters in the devise, we don't can assume any life time warranty for the tyristors and free wheeling diodes.