



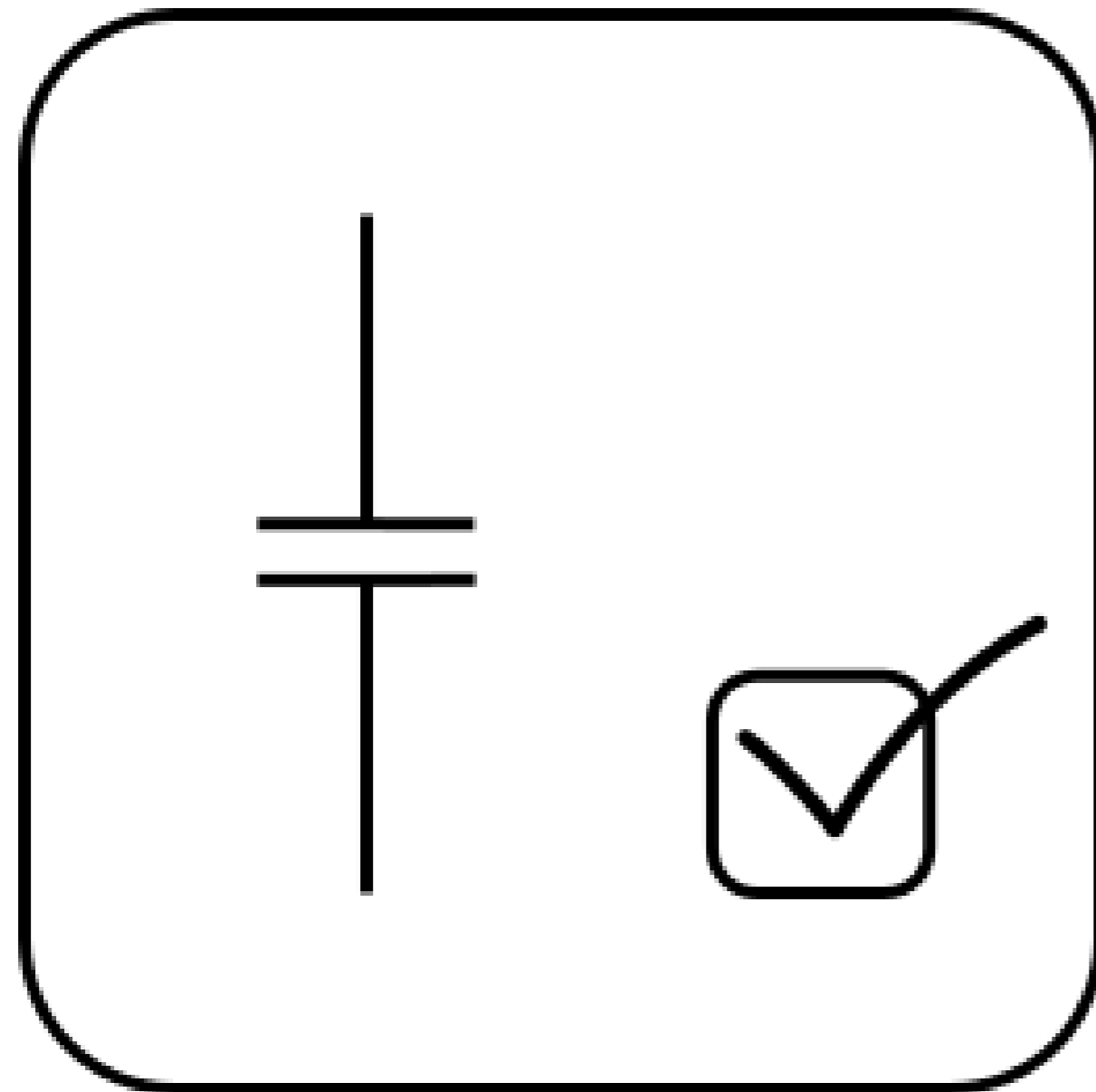
SOLUTIONS

Power Capacitor Test System PST3045



Power Capacitor Test System

TEST SYSTEM FOR LIFE TIME TESTS WITH SUPERIMPOSED AC AND DC VOLTAGE



Highlights

This solution was specially designed for life time tests of power capacitors with superimposed AC and DC voltage according to the standard IEC61071-1.

- ✓ Power Capacitor Testing
- ✓ Superimposed AC and DC Voltage
- ✓ Output Voltage 0 ... 300VAC 0 ... 2000VDC
- ✓ Output Power up to 45kVAr, up to 150A

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Challenges

For power capacitor life time tests according to IEC61071 there is the need to apply AC and DC voltage at the same time. For power capacitors this is a quite challenging task because of the high currents and voltages. Two power supplies are needed, they need to be decoupled and adjusted separately. During life time test the test object may have a breakdown or short circuit, the system must be able to handle these failures without damage. The stored energy is very high and dangerous, it must be discharged to keep the operation safe.

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Our Solution

The system consists of a AC power supply and a high voltage DC power supply. The AC power supply has 3 voltage ranges and a passive inductive PFC for compensation of the reactive current. The DC power supply is able to charge the capacitor with up to 2kV. Both supply voltages are superimposed and regulated independently. The system is fully controlled by a PLC and is operated via an integrated touch display. Remote monitoring and control is available via Ethernet and web interface. This system is fully equipped with a safety components according to EN 50191 and automatic disconnection and discharge to provide maximum safety for operators during every day work.

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Technical Specifications

AC Power Supply	1-Phase, 50Hz, 0...300V, 0...150A, up to 45kVA with PFC
Power Factor Correction	Automatic compensation of reactive load current with 10 steps
DC Power supply	0 ... 2kV, 0 ... 100mA
Power Input	3AC400V±5% 25A
Measurements	AC voltage, AC current, DC voltage, DC current
Operation	PLC Control with 7" Touch display
Dimensions	2400x2100x600mm (WxHxD), weight 1300kg

Features

- PLC Control
- Operation via 7" touch display
- Remote monitoring and control via Ethernet
- Overcurrent protection
- Automatic disconnection and discharge
- Safety equipment according to EN50191



SOLUTIONS

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SOLFAS TECHNOLOGIE GMBH

We are specialized in the development and implementation of test systems, power supplies and instrumentation. As an expert in electrical testing and automation, our company offers global innovative and reliable solutions for the industry. Our products are characterized by a precisely matching to individual customer needs hardware and software.