

# PCD 100

Single Phase Coupling / decoupling Network for PSURGE 8000 Platform

■ **IEC and EN** standards cover testing of single phase AC mains and DC power ports. They include recommendations for coupling and decoupling characteristics. These recommendations are based on the European model for ac power lines.

The PCD 100 fulfills also the recently approved IEC 61000-4-5 Edition 2.

The **ANSI** standards contain much the same information as the IEC but based around the American experience with AC power lines.

Impedance of the low voltage mains supply to earth is simulated by the addition of a 10 ohm resistor for IEC tests. ANSI has NO series resistor in the impulse path. This difference comes from the practice in Europe of connecting ground to neutral at the distribution transformer, not the power service entry as in the USA. The PCD 100 fulfills all requirements.

The integration in the WinFEAT&R **control and reporting software** package enhances an efficient set-up and operation of this test system. Most importantly, the test load can be transferred to a computer freeing valuable resources.



## ■ Technical Specifications

Maximum impulse voltage	7.5kV	EUT connection	Schuko socket
Maximum AC voltage	240V <sub>RMS</sub>	Coupling elements and paths	controlled by the PSURGE 8000
Maximum DC voltage	110V	Voltage drop due to the decoupling inductors	≤10% with max. current and $\cos \varphi \geq 0.7$
Maximum AC and DC current	16A	Residual voltage at Test supply input	max. 15% of the applied impulse voltage

## ■ Ordering Information

PCD 100 Art. No. 249904

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## ■ Features

- ☑ **Two** high voltage inputs
- ☑ **Combination wave** 1.2/50us - 8/20us
- ☑ **Ring wave** 100kHz
- ☑ **7.5kV** impulse voltage
- ☑ Line voltage **240V**
- ☑ **16A** EUT current
- ☑ Overcurrent **protection**

## ■ Benefits

**Safe and easy** - The interlocked HC connections allow your operators to test safely and easily.

**Sturdy and reliable** - Careful component selection ensures that the PCD 100 will continue to operate under the most strenuous testing regime.

**Faster completion of testing program** - The PCD 100 has two multiplexed inputs, enabling testing to continue with other pulses without having to remove power from EUT.

## ■ Application

- ☑ Single phase power line systems
- ☑ Surge tests with combination wave 1.2/50us - 8/20us and ring wave 100kHz