

1 nF Coupler with base



Techimp 1 nF Coupler is a capacitive coupler that can be applied for partial discharge measurements. It can be chosen as PD detection sensor for Techimp PDSolver, PDBase, or PDMonitor systems. It is suitable for on/off line PD tests on rotating machines, for both spot measurements and monitoring applications, in fact it can be permanently installed. A BNC termination is available to connect the coupler through a coaxial cable.

The test high voltage is applied to the coupler through the voltage tap on the top. It includes, in the base, a measurement impedance (Z_m) which allow to derive both PD signals both a reference voltage. The latter is necessary to synchronize the PDBase system.

The base includes also a surge arrester which set the maximum transient output voltage.

Specifications

Capacitance	1nF±5%
Frequency range	50÷60 Hz
Rated Voltage (AC rms)	20kV
Withstand DC voltage (1minute)	70kV
Tan δ	<5x10 ⁻⁴
PD level (20kV)	<3pC
Vout @20kV @50Hz (@60Hz)	6.3Vrms (7.5Vrms)
Phase Vout vs Vin	90°
MAX Vout	90Vpeak
Temperature range	-55°C ÷ +125°C
MAX pressure	
Overall dimensions	H 295 mm, base 187,5x187,5 mm
Output tap	BNC type (Female)

Installation scheme

