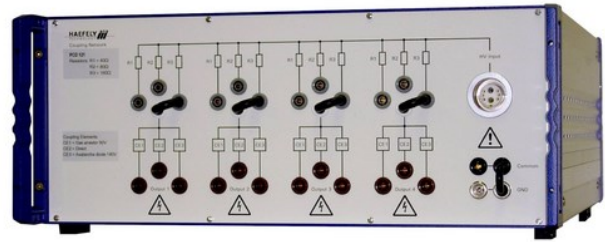


PCD 121 / 122 / 126A

Coupling Networks for AXOS 5/8

IEC/EN 61000-4-5, IEC/EN 61000-4-12,
ITU K.44

- Coupling networks for unshielded, symmetrical (PCD 121/122) or unshielded asymmetrical signal lines (Combination and Ring Wave) or symmetrical signal lines with Ring Wave (PCD 126A)
- Test of up to 4 lines simultaneously
- Serial resistors



**For AXOS devices from
HAEFELY.**

Overview

The PCDs 121, 122 and 126A are used for coupling of different impulses onto unshielded (a)symmetrical data and signal lines according IEC/EN or ITU standards (see technical data). Up to 4 lines can be tested simultaneously. To achieve maximum flexibility, only coupling elements are included in the PCDs.

Decoupling circuits that depend on the EUT to be tested, can be placed separately in the test setup. Manual coupling path switching for common mode (longitudinal, line to ground) and differential mode (transverse, line to line) tests. Default coupling elements are gas arrestors and breakdown avalanche diodes. The coupling elements can be easily selected. The direct coupling output allows the customer to use his own coupling elements.

Key facts

- Manual selection of the coupling path
- Safety banana plug, for maximum user safety
- Signal bandwidth up to more than 10 MHz (with gas arrestors as coupling elements)

Coupling Networks

	PCD 121	PCD 122	PCD 126A
IEC Standards	- IEC / EN 61000-4-5 Ed. 1: Fig. 12 - IEC / EN 61000-4-5 Ed. 2: Fig. 14	- IEC / EN 61000-4-5 Ed. 1/2 - ITU K.44: 2003 Fig. A.5-1, A.6.1-1 up to A.6.1-5	- IEC / EN 61000-4-5 Ed. 1: Fig. 10/11 - IEC / EN 61000-4-5 Ed. 2: Fig. 11/12/13 - IEC / EN 61000-4-12 Ed. 1: Fig. 9/10/13/14 - IEC / EN 61000-4-12 Ed. 2: Fig. 9/10/11



PCD 121 / 122 / 126A

Coupling Networks for AXOS 5/8

Technical data			
Coupling Networks			
	PCD 121	PCD 122 (only on request)	PCD 126A
Impulse shape	1.2 / 50 μ s – 8 / 20 μ s (impulse shape defined at the generator output only)	10 / 700 μ s – 5 / 320 μ s	1.2 / 50 μ s – 8 / 20 μ s (Z = 2 Ω) 100 kHz ring Wave (Z = 12 Ω , 30 Ω , 200 Ω)
Impuls amplitude	max. 6.6 kV	max. 6.6 kV	max. 6.6 kV (for both impulse shapes)
Serial resistor	4 x 40 Ω 4 x 80 Ω 4 x 160 Ω	4 x 25 Ω 4 x 50 Ω 4 x 100 Ω	1 x 40 Ω (for tests according to IEC 61000-4-5)
Coupling elements	gas arrestors 90 V and Avalanche breakdown diodes (ABDs)	gas arrestors 90 V and Avalanche breakdown diodes (ABDs)	capacitor 0.5 μ F / 3 μ F (for asymmetrical lines, both impulse shapes) Avalanche breakdown diode (ABD) (for asymmetrical lines, both impulse shapes) Avalanche breakdown diodes (ABDs) (for symmetrical lines, ring wave only) gas arrestors (for symmetrical lines, ring wave only) direct (for customer specific coupling elements)
Voltage on EUT lines	max. 72 V DC or 50 V AC, RMS* max. 144 V DC or 100 V AC **	max. 72 V DC or 50 V AC, RMS* max. 144 V DC or 100 V AC**	max. 375 V DC or 265 V AC, RMS*** max. 72 V DC or 50 V AC, RMS* / **
Signal bandwidth	up to > 10 MHz * up to > 1 MHz **	up to > 10 MHz * up to > 1 MHz **	up to > 1 kHz*** up to > 1 MHz** up to > 10 MHz*
Dimensions (W x D x H)	19" x 570 mm x 4 HE	450 x 570 x 195 mm (17.7 x 22.4 x 7.7 in)	450 x 570 x 195 mm (17.7 x 22.4 x 7.7 in)
Weight	appr. 10 kg net. (22 lb)	appr. 10 kg net. (22 lb)	appr. 12 kg net. (26.5 lb)
Usable with decoupling network	DEC 5	DEC 5 DEC 6	DEC 7

* with gas arrestors ** with ABDs *** with capacitors as coupling elements



PCD 121 / 122 / 126A

Coupling Networks for AXOS 5/8

Example Coupling Options:				
Impulse	Combination Wave		Ring Wave	
	symmetrical	asymmetrical	symmetrical	asymmetrical
PCD 121	x			
PCD 126A		x	x	x
PCD 121 + PCD 126A	x	x	x	x

Options – more CDNs		
No. 2490170	FP-EFT 32M	Man. 3-Phase CDN for EFT/Burst 32 A / 690 V AC / 110 V DC
No. 2495860	FP-EFT 100M2	Man. 3-Phase CDN for EFT/Burst 100 A / 690 V AC / 110 V DC
No. 2490700	FP-SURGE 32A	Auto. 3-Phase CDN for Surge 32 A / 690 V AC/DC
No. 2490180	FP-SURGE 100M2	Man. 3-phase CDN for Surge, 100 A (690 V AC / 110 V DC)
No. 2490430	FP-COMB 32	Auto. 3-Phase CDN for Surge, Ring Wave, EFT/Burst 32 A / 480 V AC/DC
No. 2499990	FP-COMB 63/690-1	Auto. 3-Phase CDN for Surge, Ring Wave, EFT/Burst, 63 A / 690 V AC/DC
No. 2490141	DEC 5	Decoupling network for testing symmetrically operated lines with Surge, Ring Wave 100 kHz and Telecom Wave 10/700 µs
No. 2490151	DEC 6	Decoupling network for testing symmetrically operated lines with Surge, Ring Wave 100 kHz and Telecom Wave 10/700 µs
No. 2490161	DEC 7	Decoupling network for testing asymmetrically operated lines with Surge, Ring Wave 100 kHz

Scope of delivery
PCD 121 (No. 2498010) or PCD 126A (No. 2498030), cable set, HV cable Fischer - Fischer 1 m, short circuit bridge(s), user manual

All information regarding appearance and technical data correspond to the current state of development at the time of release of this data sheet. We reserve the right to make technical changes. 262306

