

DEC 5 / 6 / 7

Decoupling Network for AXOS 5/8

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

- Decoupling networks for unshielded symmetrical (DEC 5 / 6) or unshielded asymmetrical signal lines (DEC 7)
- Test of up to 4 lines simultaneously
- 100 kHz Ring wave



For AXOS devices from HAEFELY.



Overview

The DEC 5, 6 and 7 are used to decouple auxiliary equipment from an EUT, which is tested with various pulses (see technical data). The DEC 5 and 6 decoupling networks can be used to decouple unshielded symmetrical data/signal lines, the DEC 7 can be used to decouple unshielded asymmetrical data and signal lines. Up to 4 lines can be tested simultaneously.

Coupling circuits that depend on the EUT under test can be placed separately in the test setup. Manual coupling selection of protection elements for best protection of auxiliary devices. Default protection elements are gas arrestors and breakdown avalanche diodes. With such elements the capacitive load to the EUT lines is small. The decoupling elements can be selected easily. It is also possible to test without any protection elements.

Key facts

- Protective elements: gas arresters and short-circuit avalanche diodes
- Safety banana plugs to ensure maximum safety to the user
- Signal bandwidth DEC 7 up to some 100 Hz, signal bandwidth DEC 6 up to some 10 MHz

Decoupling Networks

	DEC 5	DEC 6	DEC 7
IEC Standards	<ul style="list-style-type: none"> - IEC / EN 61000-4-5 Ed. 2: Fig. 14 - IEC / EN 61000-4-5 Ed. 3: Fig. 10 - IEC / EN 61000-4-12 Ed. 2: Fig. 12 - IEC / EN 61000-4-12 Ed. 3: Fig. 9 - ITU K.44: 2003 Fig. A.5-1, A.6.1-1 up to A.6.1-5 	<ul style="list-style-type: none"> - IEC / EN 61000-4-5 Ed. 1/2: Fig. 12/14*** - IEC / EN 61000-4-12 Ed. 2: Fig. 12*** - ITU K.44: 2003 Fig. A.5-1, A.6.1-1 up to A.6.1-5 ***The DEC 6 is not normative for IEC standards! 	<ul style="list-style-type: none"> - IEC / EN 61000-4-5 Ed. 2: Fig. 11 - 13 - IEC / EN 61000-4-5 Ed. 3: Fig. 9 - IEC / EN 61000-4-12 Ed. 2: Fig. 9 - 11 - IEC / EN 61000-4-12 Ed. 3: Fig. 8



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Technical data			
Decoupling Network			
	DEC 5	DEC 6	DEC 7
Impulse shape	1.2 / 50 μ s – 8 / 20 μ s 10 / 700 μ s – 5 / 320 μ s 100 kHz Ring wave	10 / 700 μ s – 5 / 320 μ s 1.2 / 50 μ s – 8 / 20 μ s 100 kHz Ring wave	1.2 / 50 μ s – 8 / 20 μ s 100 kHz Ring wave
Impulse amplitude	max. 6.6 kV	max. 6.6 kV	max. 6.6 kV
Decoupling elements	20 mH current compensated (2 inductors with two coils each)	resistors 200 Ω	inductors 20 mH not current compensated
Voltage on EUT lines	max. 72 V DC or 50 V AC, RMS* max. 144 V DC or 100 V AC, RMS**	max. 72 V DC or 50 V AC, RMS* max. 144 V DC or 100 V AC, RMS**	max. 375 V DC or 265 V AC, RMS *** max. 72 V DC or 50 V AC, RMS***
Current on EUT Lines	max. 1 A	max. 0.1 A	max. 1.5 A
Signal bandwidth for the EUT Signals	up to some 100 kHz up to some 100 kBaud	up to some 10 MHz	up to some 100 Hz
Dimensions	300 x 160 x 200 mm (11.8 x 6.3 x 7.9 in)	300 x 160 x 200 mm (11.8 x 6.3 x 7.9 in)	300 x 160 x 200 mm (11.8 x 6.3 x 7.9 in)
Weight	appr. 9 kg net. (19.8 lb)	appr. 2 kg net. (4.4 lb)	appr. 6 kg net. (13.2 lb)
For use with coupling network	PCD 121 and PCD 122	PCD 122	PCD 126A

*with gas arrestors **with ABDs ***breakdown avalanche diodes and varistors as protection elements

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. 2498010	PCD 121	Coupling network for 1.2/50 μ s – 8/20 μ s
<i>On request only</i>	PCD 122	Coupling network for 10 / 700 μ s – 5 / 320 μ s
No. 2498030	PCD 126A	Coupling network for 1.2/50 μ s – 8/20 μ s / 100 kHz Ring wave

Scope of delivery
DEC 5 (No. 2490141) **or** DEC 6 (No. 2490151) **or** DEC 7 (No. 2490161),
cable set, 4 x short circuit bridges, 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. 042307

