

DEC 7

Decoupling Network for Asymmetrical Data and Control Lines

■ The **DEC 7** is used for decoupling auxiliary equipment from an EUT tested with either 1,2/50 μ s-8/20 μ s combination wave impulses or ring wave 100kHz impulses up to 6.6kV peak. It is used to decouple unshielded asymmetrical control and data lines according IEC/EN standards. Up to 4 wires can be tested simultaneously.

To obtain maximum flexibility only decoupling and protection elements are included in the DEC 7. Coupling circuits, which depends on the EUT to be tested, can be placed separately in the test setup.

Manual coupling selection of the protection elements for best protection of the auxiliary equipment.

Default protection elements are varistors and breakdown avalanche diodes (ABDs). 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.

The DEC 7 can be used together with the coupling networks PCD 126 and IP6.2. These provide all the coupling elements as required to perform IEC, ANSI and EN testing.

With a 100 year history of innovation, service centers on three continents and a full staff development and support engineers, Haefely is the clear choice for all your transient immunity test needs.



■ Features

- ☑ Decoupling inductors 20mH not compensated
- ☑ 1,2/50 μ s-8/20 μ s combination wave impulses
- ☑ 100kHz ring wave impulses
- ☑ Breakdown avalanche diodes and varistors as protection
- ☑ Up to 4 wires can be tested
- ☑ Signal Bandwidth up to some 100Hz

■ Benefits

International application – Specifically designed to meet and exceed the requirements of:

- IEC / EN 61000-4-5 Edition 1 Figures 10 and 11 (combination wave)
- IEC / EN 61000-4-5 Edition 2 Figures 11, 12 and 13 (combination wave)
- IEC / EN 61000-4-12 Edition 1 Figures 9, 10, 13 and 14 (ring wave)
- IEC / EN 61000-4-12 Edition 2 Figures 9, 10 and 11

Safe and Easy - All the sockets are safety banana plugs to ensure maximum safety to the user. The selected protection element can be seen at a glimpse.

Sturdy and Reliable – Careful component selection ensures that the DEC 7 will continue to operate under the most strenuous testing regimen.

Report Generation - The unit controller can automatically generate test reports without a computer. Add WinFEAT&R control and reporting software on a host PC to collect and collate data in any format you like.

■ Applications

- ☑ Unshielded asymmetrical control and data lines
- ☑ Industrial and residential equipment
- ☑ Other international requirements for surge testing asymmetrical data- and control lines

■ Technical Specifications

Impulse shapes	1,2/50us-8/20us combination wave 100kHz ring wave	
Impulse amplitude	max. 6.6kV	
Decoupling elements	inductors 20mH not current compensated	
Voltage on EUT lines	max. 375V _{DC} or 265V _{AC,RMS} max. 72V _{DC} or 50V _{AC,RMS}	with varistors as protection elements with ABDs as protection elements
Current on EUT lines	max. 1.5A	
Signal bandwidth for the EUT signals	up to some 100Hz	

Other decoupling elements on request.

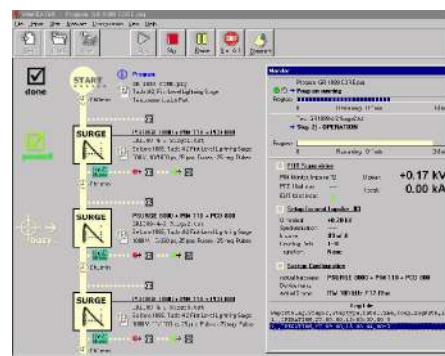
Weight and Dimensions

Weight	approx. 6 kg net	Dimensions	30 x 20 x 16 cm (w x h x d)
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■ DEC 7 Art. No. 2490161 Scope of Supply

- Qty. 1 DEC 7
- Qty. 1 Cable set
- Qty. 4 Short circuit bridges
- Qty. 1 Users Manual

WinFEAT&R Control Window



■ Options and Accessories

- PCD 126A Coupling unit according IEC 61000-4-5 and IEC 61000-4-12
Art. No. 2498030
- PSURGE 4010 Combination wave generator up to 4.2kV
Art. No. 2496000
- PSURGE 8000 Mainframe of the Surge Platform
Art. No. 2499000
- PIM 100 Combination Wave module up to 7.3kV
Art. No. 2499020
- PIM 110 Ring wave module up to 7.8kV with Z=12Ω, 30Ω and 200Ω
Art. No. 2499030
- WinFEAT&R Control and reporting software. Runs under windows 98, NT, ME, 2000, XP
Art. No. 2499701

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