



PCD 8-DC surge series High power Surge coupling network



The PCD 8-DC s-series coupling decoupling network is a manual CDN for coupling Surge pulses onto high current DC power lines. It is a Dual-Brand device and supported by EM TEST compact NX as well as by Teseq NSG 30x0A-generators. The PCD 8-DC s combine different applications:

- Differential mode: DC+ to DC-,
- Common mode: DC+ to PE,
- Common mode: DC- to PE,
- Common mode: DC+ & DC- to PE

The required coupling mode can easily be selected by means of a simple jumper. The PCD also include the required decoupling part consisting of decoupling inductors of 0.19 mH for each line and 100 uH for PE line. To protect the AE-port, an additional protection circuit is integrated at the line input.

AMETEK CTS offers the PCD 8-DC s-series coupling/decoupling network for test voltages up to 8 kV and for higher line voltages/currents (up to 1500 V and up to 400 A).

RACK FOR BURST AND SURGE

The PCD 8-DC s-series is integrated in a rack and has additional space to integrate the burst coupling decoupling network PCD 8-DC b-1-1500-400.1 in one housing.

MAIN FEATURES

- Coupling/decoupling network according to IEC/EN 61000-4-5
- Coupling to high current DC lines with 2/12 Ohm
- Line voltage 1.500 V DC up to 400 A DC
- Surge test voltage up to 8 kV
- Manual coupling for differential mode or common mode
- Supported by compact NX and NSG 30x0A

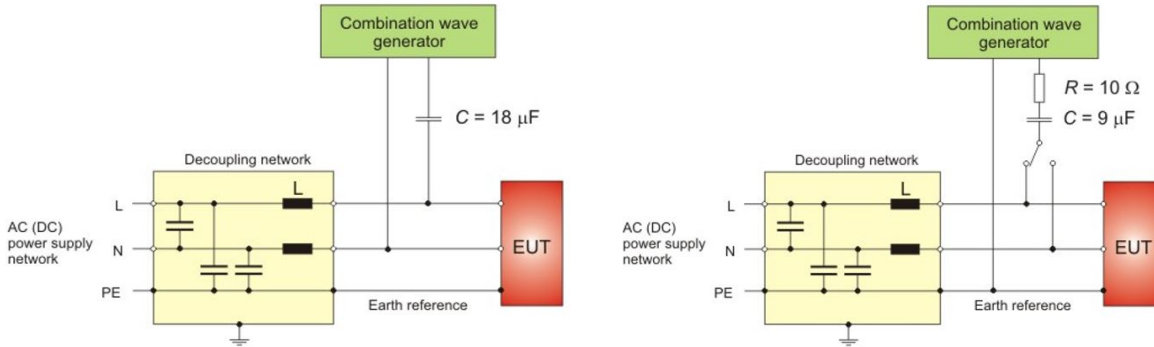


DC COUPLING FOR SURGE

The PCD 8-DC s-series coupling decoupling network is a CDNs for the application of Surge pulses onto high-voltage and currents DC-supply lines.

Surge as per IEC 61000-4-5 Ed.3, Figure 5: Capacitor 18 uF with 2 ohm

Surge as per IEC 61000-4-5 Ed.3, Figure 6: Capacitor 9 uF with 12 ohm



Technical Specifications

	PCD 8-DC s-1-1500-200	PCD 8-DC s-1-1500-400.1
DC voltage EUT	1500 V	1500 V
DC current EUT	63 - 200 A	125 - 400 A
Surge coupling	as per Fig. 5/6 of IEC 61000-4-5 Ed. 3 - 18 µF capacitor via 2 Ohm - 9 µF capacitor via 12 Ohm	as per Fig. 5/6 of IEC 61000-4-5 Ed. 3 - 18 µF capacitor via 2 Ohm - 9 µF capacitor via 12 Ohm
SURGEIMPULSE		
Impulse voltage	0.2 - 8.0 kV ±10 %	0.2 - 8.0 kV ±10 %
Coupling	Manual setting with bridges, only IEC, no ANSI	Manual setting with bridges, only IEC, no ANSI
Coupling differential	2 Ohm, 18 µF for DC+ to DC-	2 Ohm, 18 µF for DC+ to DC-
Coupling common mode	12 Ohm, 9 µF for DC+ to PE, DC- to PE, DC+, DC- to PE	12 Ohm, 9 µF for DC+ to PE, DC- to PE, DC+, DC- to PE
Residual voltage	< 3000 V @ 6000 V surge, typical < 2000 V	< 3000 V @ 6000 V surge, typical < 2000 V
EUT DATA		
Lines	DC+, DC-, PE	DC+, DC-, PE
Supply voltage	max. 1500 V	max. 1500 V
EUT current	63 - 200 A	125 - 400 A
IN/OUTPUT SOCKET		
Connector	Multi Contact: Plug ID/S10BV-NS	Multi Contact: Plug 16BL-PP/ET
DC+	Code plug C1	Code plug C1
DC-	Code plug C4	Code plug C4
PE	Code plug C5	Code plug C5
Matching connector included in delivery	Socket KBT10BV-AX (2 pcs for each code)	Socket 16BL-CS/AX/M40 (2 pcs for each code)
DECOUPLING		
Decoupling inductance	DC+: 0.3 mH; DC-: 0.3 mH; PE: 0 mH	DC+: 0.15 mH; DC-: 0.15 mH; PE: 0 mH

	PCD 8-DC s-1-1500-200	PCD 8-DC s-1-1500-400.1
DIMENSION AND WEIGHT		
Device	16 HU, 19"	16 HU, 19"
Dimension (LxWxH)	600 mm x 553 mm x 920 mm	600 mm x 553 mm x 920 mm
Weight	105 kg	160 kg
ENVIRONMENT		
Temperature	10 °C to 40 °C	10 °C to 40 °C
Humidity	10 % to 80 %, non condensing	10 % to 80 %, non condensing
Atmospheric pressure	86 kPa (860 mbar) to 106 kPa (1060 mbar)	86 kPa (860 mbar) to 106 kPa (1060 mbar)
Measuring adapter, 1 pair, max. 32 A (optional)	MSA 250-32; for pulse verification at s-1-1500-200	MSA 500-32; for pulse verification at s-1-1500-400 MSA 500-32.1; for pulse verification at s-1-1500-400.1