

# PCD 6-DC S-1-1400-400

## CDN FOR DC UP TO 1.400 V / 400 A FOR UP TO 6 KV SURGE TESTING



### FOR TESTS ACCORDING TO ...

- › ECE-R10
- › EN 61000-4-5
- › IEC 61000-4-5
- › IEC 61851-21




### PCD 6-DC S-1-1400-400 - COUPLING/DECOUPLING NETWORKS FOR HIGH CURRENT DC LINES UP TO 1.400 V

Surge pulses are applied to high voltage and high current DC lines by means of standalone coupling/decoupling networks. For such testing AMETEK CTS offers the PCD 6-DC s-1-1400-400 for DC supply lines up to 1.400 V and up to 400 A. According to IEC/EN 61000-4-5 the pulses are manually coupled via bridge elements with line to line (2 ohm/18 uF) or line to PE with (12 Ohm/ 9 uF)

### HIGHLIGHTS

- › Coupling/decoupling networks according to IEC/EN 61000-4-5
- › Coupling to high current DC lines with 2/12 Ohm
- › Line voltage 1.400 V DC up to 400 A DC
- › Surge test voltage up to 6 kV
- › Manual coupling for differential mode or common mode
- › Supported by compact NX and NSG 30x0A

### APPLICATION AREAS

-  AUTOMOTIVE
-  RENEWABLE ENERGY
-  INDUSTRY

**TECHNICAL DETAILS**

**SURGE APPLICATION**

**PCD 6-DC S-1-1400-400**

The AMETEK CTS PCD 6-DC s-1-1400-400 coupling decoupling networks is a manual CDN for coupling Surge pulses onto high current DC power lines.

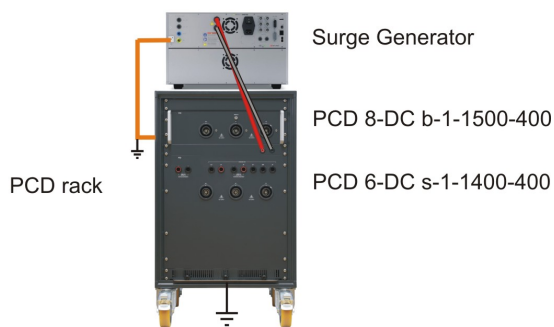
It is a Dual-Brand device and supported by EM TEST compact NX- as well as by Teseq NSG 30x0A-generators.

The PCD 6-DC s-1-1400-400 combine three different applications; coupling of Surge pulse  
 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 uF for PE line. To protect the AE-port, an additional protection circuit is integrated at the line input.

AMETEK CTS offers the PCD 6-DC s-1-1400-400 coupling/decoupling networks for test voltages up to 6 kV and for higher line voltages/currents (up to 1.400 V and up to 400 A).



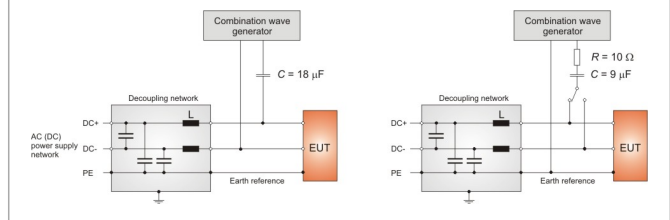
**COUPLING**

**DC COUPLING FOR SURGE**

The PCD 6-DC s-1-1400-400 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 DETAILS

### PCD 6-DC S-1-1400-400

#### 6 KV MODEL, LINE VOLTAGE MAX. 1.400 V DC

PCD 6-DC s-1-1400-400	6 kV coupling/decoupling network max. line current 400 A
DC voltage EUT	1.400 V
DC current EUT	125 - 400 A
Surge coupling	as per Fig. 5/6 of IEC 61000-4-5 Ed.3, - 18 $\mu$ F capacitor via 2 ohm, - 9 $\mu$ F capacitor via 12 ohm

### TECHNICAL DATA

#### SURGE IMPULSE

Impulse voltage	0.2 - 6.0 kV $\pm$ 10%
Coupling	Manual setting with bridges
coupling differential	2 ohm, 18 $\mu$ F to DC+ to DC-
coupling common mode	12 ohm, 9 $\mu$ F to DC+ to PE, DC- to PE DC+, DC- to PE
Residual voltage	< 3000 V @ 6000 V surge, typical < 2000 V

#### EUT DATA

Lines	DC+, DC-, PE
supply voltage	max. 1.400 V
EUT current	125 - 400 A

#### OUTPUT SOCKET

Connector	Multi Contact: Socket ID/B16BV-NS-A
DC+	Code plug C1
DC-	Code plug C4
PE	Code plug C5

### GENERAL

#### DECOUPLING

Decoupling inductance	0.19 mH, each line, 100 $\mu$ H, PE
-----------------------	--

#### PCD 6-DC S-1-1400-400, DIMENSION AND WEIGHTS

Rack	16 HU, 19"
dimension (LxWxH)	553 mm x 600 mm x 920 mm
Weight	103.0 kg

#### ENVIRONMENT

Temperature	10 °C to 40 °C
Humidity	10 % to 80 %, non condensing
Atmospheric pressure	86 kPa (860 mbar) to 106 kPa (1,060 mbar)

# COMPETENCE WHEREVER YOU ARE



## CONTACT EM TEST DIRECTLY

### Switzerland

AMETEK CTS GmbH > Sternenhofstraße 15 > 4153 Reinach > Switzerland  
 Phone +41 (0)61 204 41 11 > Fax +41 (0)61 204 41 00  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [sales.conducted.cts@ametek.com](mailto:sales.conducted.cts@ametek.com)

### Germany

AMETEK CTS Europe GmbH > Customer Care Center EMEA > Lünener Straße 211  
 > 59174 Kamen > Germany  
 Phone +49 (0) 2307 26070-0 > Fax +49 (0) 2307 17050  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [info.cts.de@ametek.com](mailto:info.cts.de@ametek.com)

### Poland

AMETEK CTS Europe GmbH > Biuro w Polsce > ul. Twarda 44 > 00-831 Warsaw > Poland  
 Phone +48 (0) 518 643 12  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [Infopolska.cts@ametek.com](mailto:Infopolska.cts@ametek.com)

### USA / Canada

AMETEK CTS US > 52 Mayfield Ave > Edison > NJ 08837 > USA  
 Phone +1 732 417 0501  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [usasales.cts@ametek.com](mailto:usasales.cts@ametek.com)

### P.R. China

AMETEK Commercial Enterprise (Shanghai) Co. Ltd.> Beijing Branch>  
 Western Section, 2nd floor> Jing Dong Fang Building (B10)> Chaoyang  
 District>Beijing, China, 100015  
 Phone +86 10 8526 2111 > Fax +86 (0)10 82 67 62 38  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [chinasales@ametek.com](mailto:chinasales@ametek.com)

### Republic of Korea

EM TEST Korea Limited > #405 > WooYeon Plaza > #986-8 > YoungDeok-dong >  
 Giheung-gu > Yongin-si > Gyeonggi-do > Korea  
 Phone +82 (31) 216 8616 > Fax +82 (31) 216 8616  
 Internet: [www.emtest.co.kr](http://www.emtest.co.kr) > E-mail: [sales@emtest.co.kr](mailto:sales@emtest.co.kr)

### Singapore

AMETEK Singapore Pte. Ltd > No. 43 Changi South Avenue 2 > 04-01 Singapore  
 48164  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com) > E-mail: [singaporesales.cts@ametek.com](mailto:singaporesales.cts@ametek.com)

### Great Britain

AMETEK GB > 5 Ashville Way > Molly Millars Lane > Wokingham > Berkshire  
 RG41 2 PL > Great Britain  
 Phone +44 845 074 0660  
 Internet: [www.ametek-cts.com](http://www.ametek-cts.com)

Information about scope of delivery, visual design and technical data correspond with the state of development at time of release. Subject to change without further notice.