

## Surge protection device - CN-UB-280DC-SB - 2818148

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Attachment plug with replaceable surge protection for coaxial signal interfaces. Connection: N connector male/female connector

### Why buy this product

- For outdoor installations
- Mounting plate enables mounting, e.g., in a control cabinet
- Replaceable, gas-filled arrester
- Installed as surge protection between antenna and wireless module
- Gas-filled surge arrester can be replaced in case of malfunction



### Key commercial data

Packing unit	1
Minimum order quantity	1
Catalog page	Page 170 (TT-2011)
GTIN	 4 017918 148379
Custom tariff number	85363010
Country of origin	GERMANY

### Technical data

#### General

Housing material	Nickel-plated brass
Color	nickel
Standards for air and creepage distances	IEC 60664-1
Surge voltage category	III
Pollution degree	2
Total surge current (8/20) $\mu$ s	20 kA
Total surge current (10/350) $\mu$ s	2.5 kA
Ambient temperature (operation)	-40 °C ... 80 °C
Mounting type	Connection-specific intermediate plugging
Design	Attachment plug
Degree of protection	IP55

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## Technical data

### General

Direction of action	Line-Shield/Earth Ground
Width	25 mm
Height	25 mm
Depth	72 mm

### Protective circuit

IEC category	C2
IEC category	C3
IEC category	D1
VDE requirement class	C2
VDE requirement class	C3
VDE requirement class	D1
Maximum continuous operating voltage UC	280 V DC
Maximum continuous operating voltage UC	195 V AC
Maximum continuous voltage UC (wire-ground)	280 V DC
Maximum continuous voltage UC (wire-ground)	195 V AC
Nominal current I <sub>N</sub>	5 A (25°C)
Operating effective current I <sub>C</sub> at UC	≤ 1 μA
Nominal discharge surge current I <sub>n</sub> (8/20) μs (Core-Earth)	20 kA
Nominal discharge surge current I <sub>n</sub> (8/20) μs (Core-Shield)	20 kA
Total surge current (8/20) μs	20 kA
Max. discharge surge current I <sub>max</sub> (8/20) μs maximum (Core-Shield)	20 kA
Nominal pulse current I <sub>an</sub> (10/1000) μs (Core-Shield)	100 A
Lightning test current (10/350) μs, peak value I <sub>imp</sub>	2.5 kA
Output voltage limitation at 1 kV/μs (Core-Earth) spike	≤ 900 V
Output voltage limitation at 1 kV/μs (Core-Shield) spike	≤ 900 V
Protection level UP (Core-Earth)	≤ 1.1 kV (C2 - 10 kV / 5 kA)
Protection level UP (Core-Earth)	≤ 900 V (C1 - 1 kV/500 A)
Protection level UP (Core-Earth)	≤ 1 kV (C3 - 25 A)
Protection level UP (Core-Earth)	≤ 1 kV (C3 - 25 A)
Protection level UP (Core-Earth)	≤ 1 kV (C3 - 25 A)
Protection level UP (Core-Shield)	≤ 1.1 kV (C2 - 10 kV / 5 kA)
Protection level UP (Core-Shield)	≤ 900 V (C1 - 1 kV/500 A)
Protection level UP (Core-Shield)	≤ 1 kV (C3 - 25 A)
Protection level UP (Core-Shield)	≤ 1 kV (C3 - 25 A)
Protection level UP (Core-Shield)	≤ 1 kV (C3 - 25 A)
Response time t <sub>A</sub> (Core-Earth)	≤ 100 ns
Response time t <sub>A</sub> (Core-GND)	≤ 100 ns
Input attenuation a <sub>E</sub> , asym.	Typ. 0.1 dB (≤ 1.2 GHz)
Input attenuation a <sub>E</sub> , asym.	Typ. 0.2 dB (≤ 2.2 GHz)
Cut-off frequency f <sub>g</sub> (3 dB), asym. (shield) in 50 Ohm system	> 3 GHz
Standing wave ratio SWR in a 50 Ω system	Typ. 1.1 (≤ 2 GHz)
Permissible HF power P <sub>max.</sub> at SWR=xx (50 Ohm system)	700 W (VSWR = 1.1)

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## Technical data

### Protective circuit

Permissible HF power Pmax. at SWR=xx (50 Ohm system)	200 W (VSWR = ∞)
Capacity (Core-Earth)	Typ. 1.5 pF
Capacity asymmetrical (shield)	Typ. 1.5 pF
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C1 (1 kV / 500 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (10 kV/5 kA)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C3 (100 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	D1 (2.5 kA)

### Connection data

Connection method	N connector 50 Ω
Connection type IN	N connector, male
Connection type OUT	N connector, female

### Connection, protective circuit

Standards/regulations	IEC 61643-21
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## Classifications

### eclass

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130807
eCl@ss 7.0	27130807

### etim

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943

### unspsc

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

## Approvals

### Approvals

Approvals

UL Listed / GOST

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## Approvals

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Ex Approvals

UL Recognized / cUL Recognized / cULus

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Approvals submitted

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## Approval details

UL Listed	
Nominal current I <sub>N</sub>	5 A
Nominal voltage U <sub>N</sub>	280 V

GOST	
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## Accessories

Accessories

Assembly

Mounting plate - CN-UB/MP - 2818135



Tongue for attaching the CN-UB..., to housing panels, for example.

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Mounting plate - CN-UB/MP-90DEG-50 - 2803137



Angled bracket for individually fixing CN-UB... to housing panels, for example.

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## Additional products

# Surge protection device - CN-UB-280DC-SB - 2818148

## Accessories

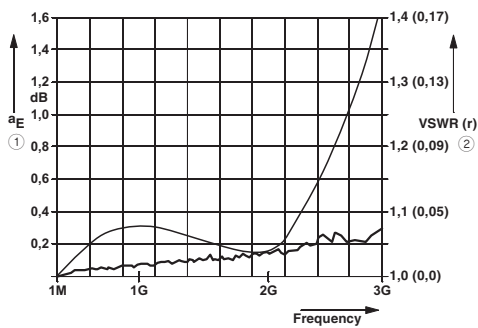
Mounting plate - CN-UB/MP - 2818135



Tongue for attaching the CN-UB..., to housing panels, for example.

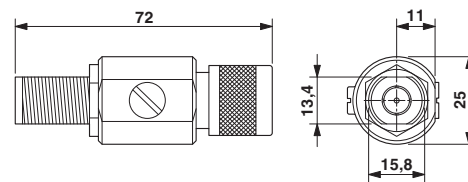
## Drawings

### Diagram



- ① Typical attenuation curve for CN-UB-280DC...
- ② Typical VSWR at CN-UB-280DC...

### Dimensioned drawing



### Circuit diagram

