

## Surge protection device - CN-UB-280DC-3-SB - 2801051

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

### Your advantages

- ✓ 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

### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 675734
GTIN	4046356675734

### Technical data

#### Dimensions

Height	33.5 mm
Width	31 mm
Length	56.8 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C
Altitude	2000 m
Degree of protection	IP55

#### General

Housing material	HPb59-1
Color	nickel
Standards for clearances and creepage distances	IEC 60664-1

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## Technical data

### General

Mounting type	Connection-specific intermediate plugging
Type	Attachment plug
Number of positions	1
Direction of action	Line-Shield/Earth Ground

### Protective circuit

IEC test classification	C2
	C3
	D1
Maximum continuous voltage $U_C$	280 V DC
Maximum continuous voltage $U_C$ (line-earth)	280 V DC
Rated current	5 A (25 °C)
Operating effective current $I_C$ at $U_C$	$\leq 1 \mu\text{A}$
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$	20 kA
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$ (line-earth)	20 kA
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$ (line-shield)	20 kA
Total surge current (10/350) $\mu\text{s}$	2.5 kA
Total discharge current $I_{\text{total}}$ (8/20) $\mu\text{s}$	20 kA
Max. discharge current $I_{\text{max}}$ (8/20) $\mu\text{s}$	20 kA
Max. discharge current $I_{\text{max}}$ (8/20) $\mu\text{s}$ maximum (line-earth)	20 kA
Max. discharge current $I_{\text{max}}$ (8/20) $\mu\text{s}$ maximum (line-shield)	20 kA
Nominal pulse current $I_{\text{an}}$ (10/1000) $\mu\text{s}$ (Core-Shield)	100 A
Impulse discharge current (10/350) $\mu\text{s}$ , peak value $I_{\text{imp}}$	2.5 kA
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-earth) spike	$\leq 900 \text{ V}$
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-shield) spike	$\leq 900 \text{ V}$
Voltage protection level $U_p$ (line-earth)	$\leq 1.1 \text{ kV}$ (C2 - 10 kV / 5 kA)
	$\leq 900 \text{ V}$ (C1 - 1 kV/500 A)
Voltage protection level $U_p$ (line-shield)	$\leq 1.1 \text{ kV}$ (C2 - 10 kV / 5 kA)
	$\leq 900 \text{ V}$ (C1 - 1 kV/500 A)
Response time $t_A$ (line-earth)	$\leq 100 \text{ ns}$
Response time $t_A$ (line-shield)	$\leq 100 \text{ ns}$
Input attenuation aE, asym.	typ. 0.1 dB ( $\leq 3 \text{ GHz}$ )
Cut-off frequency $f_g$ (3 dB), asym. (shield) in 50 Ohm system	$> 3 \text{ GHz}$
Frequency range	0 Hz ... 3 GHz
Standing wave ratio SWR in a 50 $\Omega$ system	typ. 1.15 ( $\leq 3 \text{ GHz}$ )
	max. 1.2
Permissible HF power $P_{\text{max}}$ at VSWR = xx (50 ohm system)	700 W (VSWR = 1.1)
	200 W (VSWR = $\infty$ )
Capacity (line-earth)	typ. 1.5 pF
Capacity asymmetrical (shield)	typ. 1.5 pF

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## Technical data

### Protective circuit

Surge protection fault message	none
Impulse durability (line-earth)	C2 - 10 kV/5 kA
	C3 - 100 A
	D1 - 2.5 kA

### Connection data

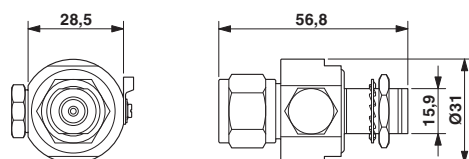
Connection method	N connector 50 Ω
Connection method IN	N connector, male
Connection method OUT	N connector, female

### Standards and Regulations

Standards/specifications	IEC 61643-21/A1 2008
	EN 61643-21/A1 2009

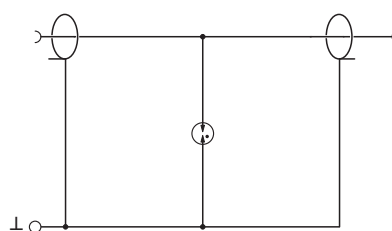
## Drawings

Dimensional drawing



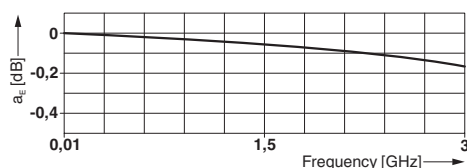
Dimensional drawing  
CN-UB-280DC-3-SB

Circuit diagram

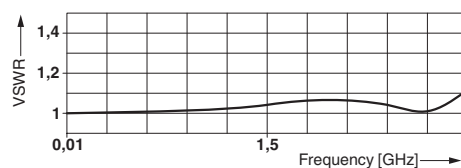


Circuit diagram

Diagram



Diagram



## Approvals

### Approvals

Approvals

EAC


Ex Approvals

## Surge protection device - CN-UB-280DC-3-SB - 2801051

### Approvals

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#### Approval details

EAC		RU C- DE.A*30.B01561
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