

## 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         | <br>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) $\mu\text{s}$ (line-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

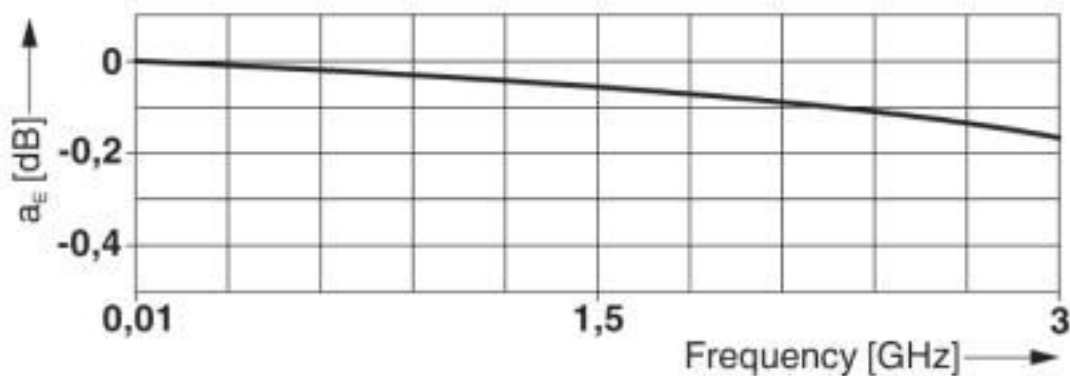
|                          |                      |
|--------------------------|----------------------|
| Standards/specifications | IEC 61643-21/A1 2008 |
|                          | EN 61643-21/A1 2009  |

### Environmental Product Compliance

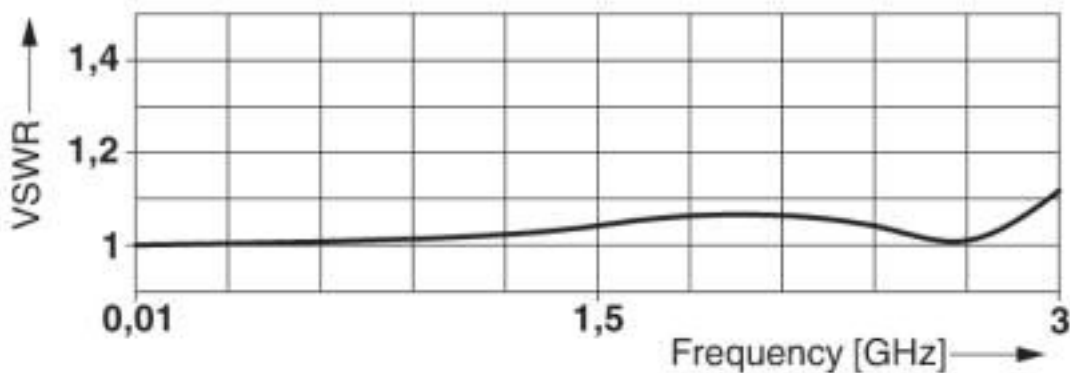
|            |                |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

## Drawings

Diagram

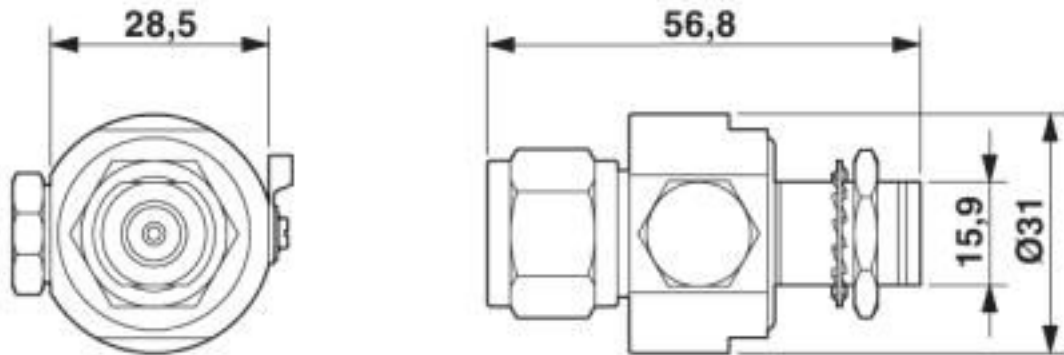


Diagram



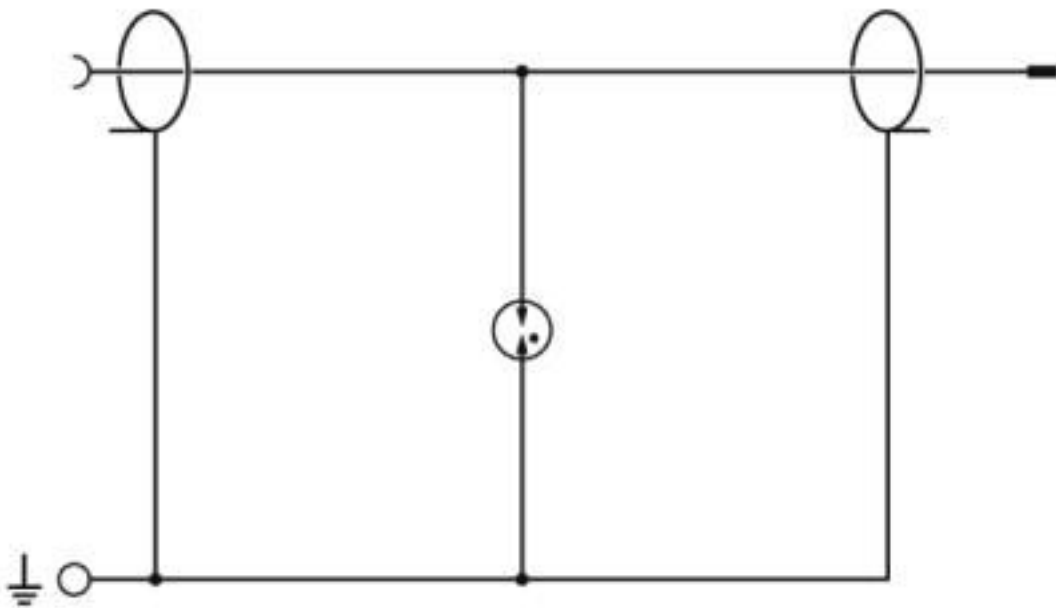
# Surge protection device - CN-UB-280DC-3-SB - 2801051

Dimensional drawing



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

Circuit diagram



Circuit diagram

## Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27130807 |
| eCl@ss 4.0    | 27130800 |
| eCl@ss 4.1    | 27130800 |
| eCl@ss 5.0    | 27130800 |
| eCl@ss 5.1    | 27130800 |
| eCl@ss 6.0    | 27130800 |

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## Classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 7.0 | 27130807 |
| eCl@ss 8.0 | 27130807 |
| eCl@ss 9.0 | 27130807 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC000943 |
| ETIM 3.0 | EC000943 |
| ETIM 4.0 | EC000943 |
| ETIM 5.0 | EC000943 |
| ETIM 6.0 | EC000943 |
| ETIM 7.0 | EC000943 |

### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30212010 |
| UNSPSC 7.0901 | 39121610 |
| UNSPSC 11     | 39121610 |
| UNSPSC 12.01  | 39121610 |
| UNSPSC 13.2   | 39121620 |
| UNSPSC 18.0   | 39121620 |
| UNSPSC 19.0   | 39121620 |
| UNSPSC 20.0   | 39121620 |
| UNSPSC 21.0   | 39121620 |

## Approvals

### Approvals

Approvals

EAC

Ex Approvals

### Approval details

|     |  |                         |
|-----|--|-------------------------|
| EAC |  | RU C-<br>DE.*09.B.00169 |
|-----|--|-------------------------|

## Accessories

### Accessories

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

### Accessories

#### Assembly adapter

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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### Spare parts

Gas-filled surge arrester - CN-UB-G1 - 2818203



Reserve gas-filled surge arrester for CN-UB-280DC...

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