

# CN-UB-70DC-6-SB - Surge protection device



2803153

<https://www.phoenixcontact.com/us/products/2803153>

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

## Your advantages

- Mounting plate enables mounting, e.g., in a control cabinet

## Commercial data

Item number	2803153
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	CL25
Product key	CL3311
GTIN	4046356293204
Weight per piece (including packing)	83.1 g
Weight per piece (excluding packing)	83.1 g
Customs tariff number	85363010
Country of origin	US

## Technical data

### Notes

#### General

Note	To meet the discharge conditions for DC voltages, please note the following information: "The surge protective device should be used together with a transmitter unit, which shuts down in the event of a short-circuit."
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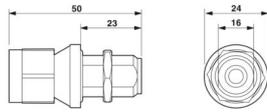
### Product properties

Product type	Surge protection for transceiver systems
IEC test classification	C2
	C3
	D1
VDE requirement class	C2
	C3
	D1
Type	Intermediate plug
Surge protection fault message	none

### Connection data

Connection method	N connector 50 Ω
Tightening torque	1.4 Nm ... 1.7 Nm (N coupling nut)

### Dimensions

Dimensional drawing	
Width	24 mm
Height	24 mm
Depth	50 mm

### Material specifications

Color	nickel color
Seal material	Silicon
Housing material	Brass (CuZn)
Housing surface material	Ni
Inner conductor material	BeCu
Inner conductor surface material	Gold
Insulation body material	PTFE

### Mechanical properties

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## Mechanical data

Open side panel	No
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## Protective circuit

Direction of action	Line-Shield/Earth Ground
Maximum continuous operating voltage $U_C$	70 V DC
	50 V AC
Maximum continuous voltage $U_C$ (line-earth)	70 V DC
	50 V AC
Rated current	10 A
Operating effective current $I_C$ at $U_C$	$\leq 1 \mu\text{A}$
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$	5 kA
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$ (line-ground)	5 kA
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$ (line-shield)	5 kA
Pulse discharge current $I_{imp}$ (10/350) $\mu\text{s}$	1 kA
Pulse discharge current $I_{imp}$ (10/350) $\mu\text{s}$ (line-earth)	1 kA
Max. discharge current $I_{max}$ (8/20) $\mu\text{s}$ maximum (line-earth)	10 kA
Max. discharge current $I_{max}$ (8/20) $\mu\text{s}$ maximum (line-shield)	10 kA
Nominal pulse current $I_{an}$ (10/1000) $\mu\text{s}$ (line-shield)	100 A
Impulse discharge current (10/350) $\mu\text{s}$ , peak value $I_{imp}$	1 kA
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-earth) spike	$\leq 650 \text{ V}$
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-shield) spike	$\leq 650 \text{ V}$
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-earth) static	$\leq 650 \text{ V}$
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-shield) static	$\leq 650 \text{ V}$
Voltage protection level $U_p$ (line-earth)	$\leq 800 \text{ V}$ (C2 - 4 kV / 2 kA)
	$\leq 1 \text{ kV}$ (C2 - 10 kV / 5 kA)
Voltage protection level $U_p$ (line-shield)	$\leq 800 \text{ V}$ (C2 - 4 kV / 2 kA)
	$\leq 1 \text{ kV}$ (C2 - 10 kV / 5 kA)
Response time $t_A$ (line-earth)	$\leq 100 \text{ ns}$
Response time $t_A$ (line-shield)	$\leq 100 \text{ ns}$
Input attenuation aE, asym.	0.1 dB ( $\leq 6 \text{ GHz}$ )
Cut-off frequency $f_g$ (3 dB), asym. (shield) in 50 $\Omega$ system	$> 6 \text{ GHz}$
Frequency range	0 Hz ... 6 GHz
Voltage standing wave ratio VSWR in a 50 $\Omega$ system	typ. 1.15 ( $\leq 6 \text{ GHz}$ )
Permissible HF power $P_{max}$ at VSWR = xx (50 ohm system)	30 W (VSWR = 1.15)
Capacity (Core-Earth)	typ. 1.5 pF
Capacity asymmetrical (shield)	typ. 1.5 pF
Surge protection fault message	none
Impulse durability (line-earth)	C2 - 10 kV / 5 kA
	C3 - 100 A
	D1 - 1 kA
Impulse durability (line-shield)	C2 - 10 kV/5 kA
	C3 - 100 A

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	D1 - 1 kA
Alternating current carrying capacity (line-shield)	5 A - 1 s

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP68
	IP68
Ambient temperature (operation)	-40 °C ... 90 °C

## Standards and regulations

VDE requirement class	C2
	C3
	D1

### Air clearances and creepage distances

Standards/regulations	DIN VDE 0110-1 / IEC 60664-1
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### Standards Information technology specification

Standards/regulations	IEC 61643-21
	IEC 61643-21
Standards/specifications	IEC 61643-21
Note	2000

## Mounting

Mounting type	Connection-specific intermediate plugging
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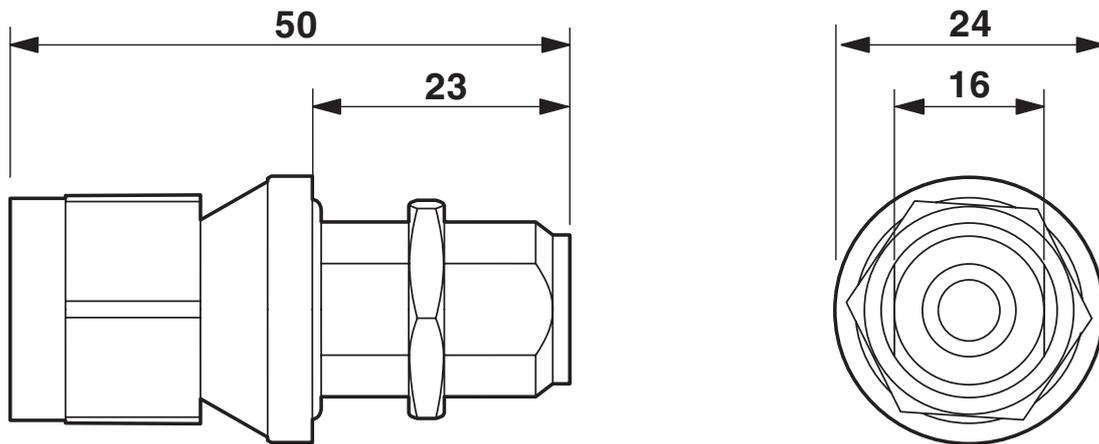


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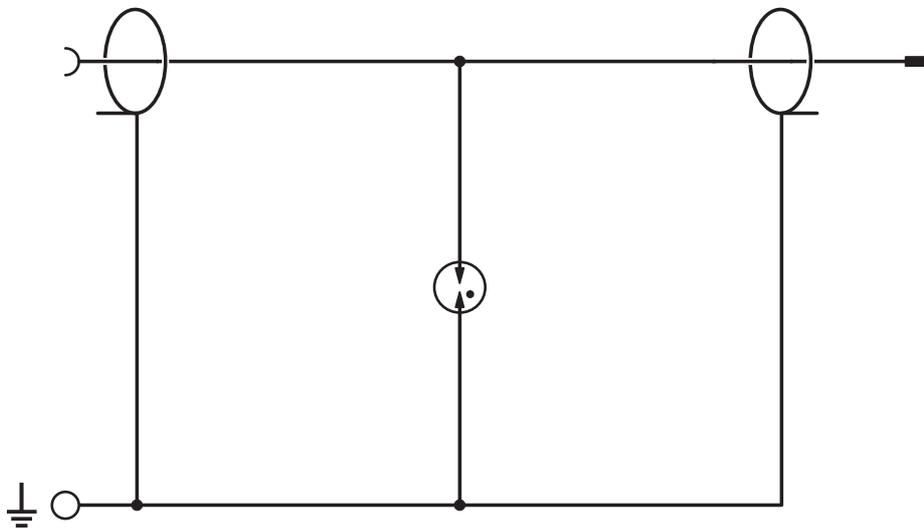
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## Drawings

Dimensional drawing



Circuit diagram



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## Classifications

### ECLASS

ECLASS-13.0	27171504
ECLASS-15.0	27171504

### ETIM

ETIM 9.0	EC000943
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### UNSPSC

UNSPSC 21.0	39121600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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### EF3.0 Climate Change

CO2e kg	8.725 kg CO2e
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