

CN-UB-70DC-6-BB - Surge protection device



2803166

<https://www.phoenixcontact.com/us/products/2803166>

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

Your advantages

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

Commercial data

Item number	2803166
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL25
Product key	CL3311
GTIN	4046356293211
Weight per piece (including packing)	75.7 g
Weight per piece (excluding packing)	75 g
Customs tariff number	85363010
Country of origin	US

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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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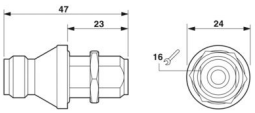
Product properties

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	47 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) μs	5 kA
Nominal discharge current I_n (8/20) μs (line-ground)	5 kA
Nominal discharge current I_n (8/20) μs (line-shield)	5 kA
Pulse discharge current I_{imp} (10/350) μs	1 kA
Pulse discharge current I_{imp} (10/350) μs (line-earth)	1 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	10 kA
Max. discharge current I_{max} (8/20) μs maximum (line-shield)	10 kA
Nominal pulse current I_{an} (10/1000) μs (line-shield)	100 A
Impulse discharge current (10/350) μs , peak value I_{imp}	1 kA
Output voltage limitation at 1 kV/ μs (line-earth) spike	$\leq 650 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-shield) spike	$\leq 650 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-earth) static	$\leq 650 \text{ V}$
Output voltage limitation at 1 kV/ μs (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 Ω system	$> 6 \text{ GHz}$
Frequency range	0 Hz ... 6 GHz
Voltage standing wave ratio VSWR in a 50 Ω 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
Ambient temperature (operation)	-40 °C ... 90 °C

Standards and regulations

VDE requirement class	C2
	C3
	D1

Standards Information technology specification

Standards/regulations	IEC 61643-21
	IEC 61643-21

Air clearances and creepage distances

Standards/regulations	DIN VDE 0110-1 / IEC 60664-1
Standards/specifications	IEC 61643-21
Note	2000

Mounting

Mounting type	Connection-specific intermediate plugging
Assembly note	Outdoors and indoors

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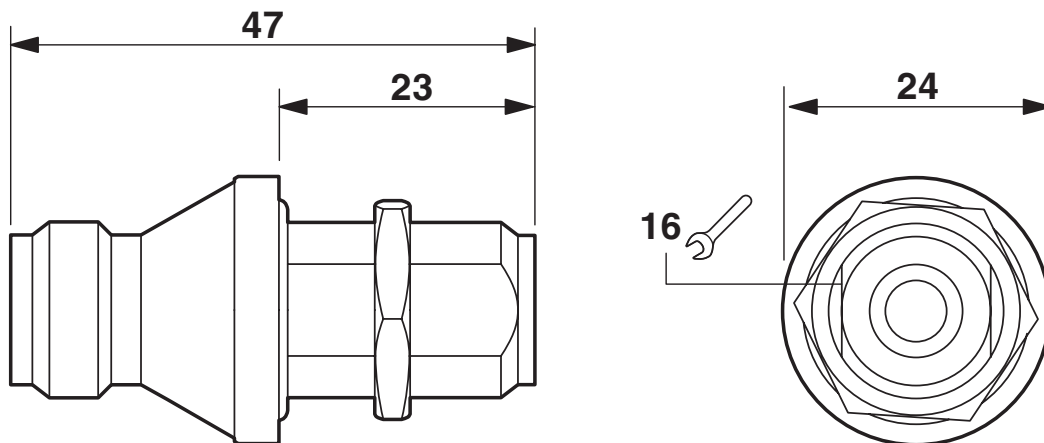


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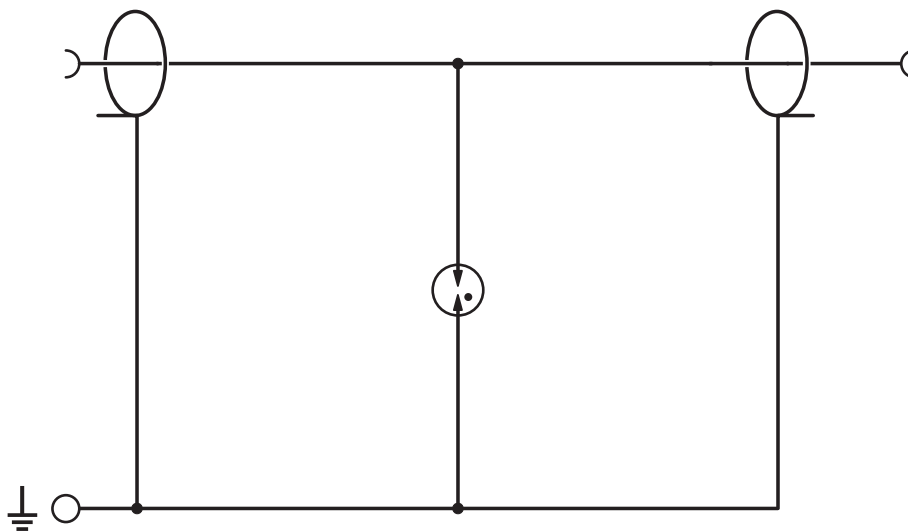
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Drawings

Dimensional drawing



Circuit diagram



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Classifications

ECLASS

ECLASS-13.0	27171504
ECLASS-15.0	27171504

ETIM

ETIM 10.0	EC001466
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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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EF3.1 Climate Change

CO2e kg	8.725 kg CO2e
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