

Surge protection device - CN-UB-280DC-BB



2818850

<https://www.phoenixcontact.com/gb/products/2818850>

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

Your advantages

- Easy installation with system-compliant connection
- Use under extreme ambient conditions with robust design
- Service-friendly with replaceable protective components

Commercial Data

Item number	2818850
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	CL3311
Product Key	CL3311
Catalog Page	Page 475 (C-8-2013)
GTIN	4017918164027
Weight per Piece (including packing)	141.4 g
Weight per Piece (excluding packing)	131.45 g
Customs tariff number	85363010
Country of origin	DE

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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

IEC test classification	C1
	C2
	C3
	D1
Type	Attachment plug
Product type	Surge protection for transceiver systems
Surge protection fault message	none

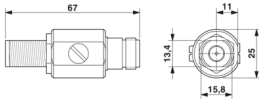
Insulation characteristics

Overvoltage category	III
Pollution degree	2

Connection data

Connection method	N connector 50 Ω
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Dimensions

Dimensional drawing	
Width	25 mm
Width	25 mm
Height	25 mm
Height	25 mm
Depth	67 mm
Depth	67 mm

Material specifications

Seal material	Silicon
Housing surface material	Nickel
Contact surface material	Au
Housing material	Nickel-plated brass
Inner conductor material	CuZn
Inner conductor surface material	Gold

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Insulation body material	PTFE
Spring contact material	CuSn

Mechanical properties

Mechanical data

Open side panel	No
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Protective circuit

Direction of action	Line-Shield/Earth Ground
Maximum continuous voltage U_C	280 V DC
	195 V AC
Rated current	5 A (25 °C)
Operating effective current I_C at U_C	$\leq 1 \mu\text{A}$
Nominal discharge surge current I_n (8/20) μs (Core-Earth)	20 kA
Nominal discharge surge current I_n (8/20) μs (core-shield)	20 kA
Pulse discharge current I_{imp} (10/350) μs (line-earth)	2.5 kA
Pulse discharge current I_{imp} (10/350) μs (line-shield)	2.5 kA
Total discharge current I_{total} (8/20) μs	20 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	20 kA
Max. discharge current I_{max} (8/20) μs maximum (line-shield)	20 kA
Nominal pulse current I_{an} (10/1000) μs (line-earth)	100 A
Nominal pulse current I_{an} (10/1000) μs (line-shield)	100 A
Output voltage limitation at 1 kV/ μs (line-earth) spike	≤ 900 V
Output voltage limitation at 1 kV/ μs (line-shield) spike	≤ 900 V
Voltage protection level U_p (line-earth)	≤ 900 V (C1 - 1 kV / 500 A)
	≤ 1.1 kV (C2 - 10 kV / 5 kA)
	≤ 1 kV (C3 - 25 A)
Voltage protection level U_p (line-shield)	≤ 900 V (C1 - 1 kV / 500 A)
	≤ 1.1 kV (C2 - 10 kV / 5 kA)
	≤ 1 kV (C3 - 25 A)
Response time t_A	≤ 100 ns
Input attenuation aE, asym.	typ. 0.1 dB (≤ 1.2 GHz / 50 Ω)
	typ. 0.2 dB (≤ 2.2 GHz / 50 Ω)
Cut-off frequency f_g (3 dB), asym. (shield) in 50 Ω system	> 3 GHz
Voltage standing wave ratio VSWR in a 50 Ω system	typ. 1.1 (≤ 2 GHz)
Permissible HF power P_{max} at VSWR = xx (50 ohm system)	700 W (VSWR = 1.1)
	200 W (VSWR = ∞)
Capacity	typ. 1.5 pF
Surge protection fault message	none
Impulse durability (line-earth)	C1 - 1 kV / 500 A
	C2 - 10 kV / 5 kA
	C3 - 100 A
	D1 - 2.5 kA
	C1 - 1 kV / 500 A

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Impulse durability (line-shield)	C2 - 10 kV/5 kA
	C3 - 100 A
	D1 - 2.5 kA

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP55
Ambient temperature (operation)	-40 °C ... 80 °C
Altitude	≤ 2000 m (amsl (above mean sea level))

Standards and regulations

Standards/specifications	IEC 61643-21
Standards/specifications	EN 61643-21

Mounting

Mounting type	Connection-specific intermediate plugging
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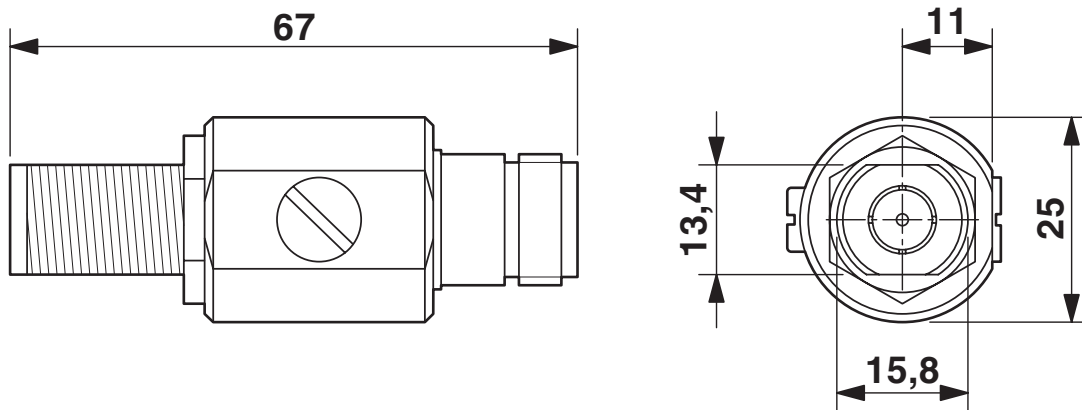


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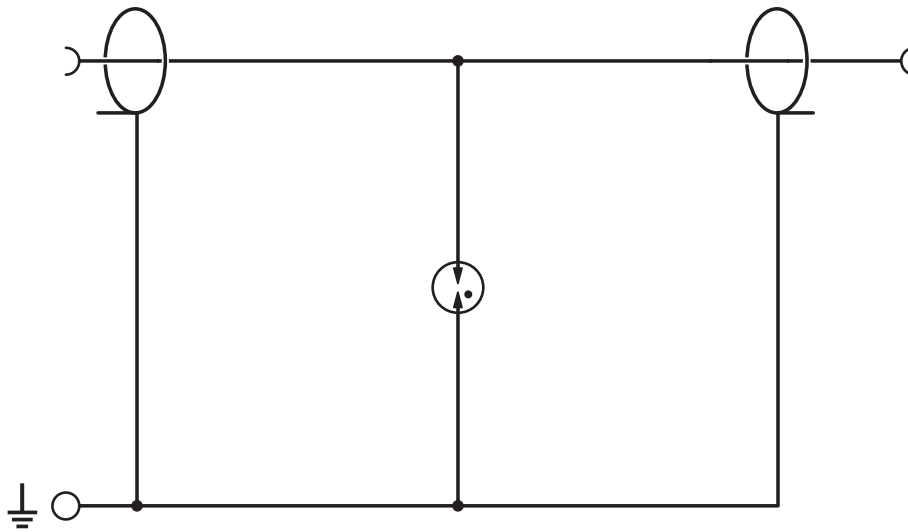
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Drawings

Dimensional drawing



Circuit diagram



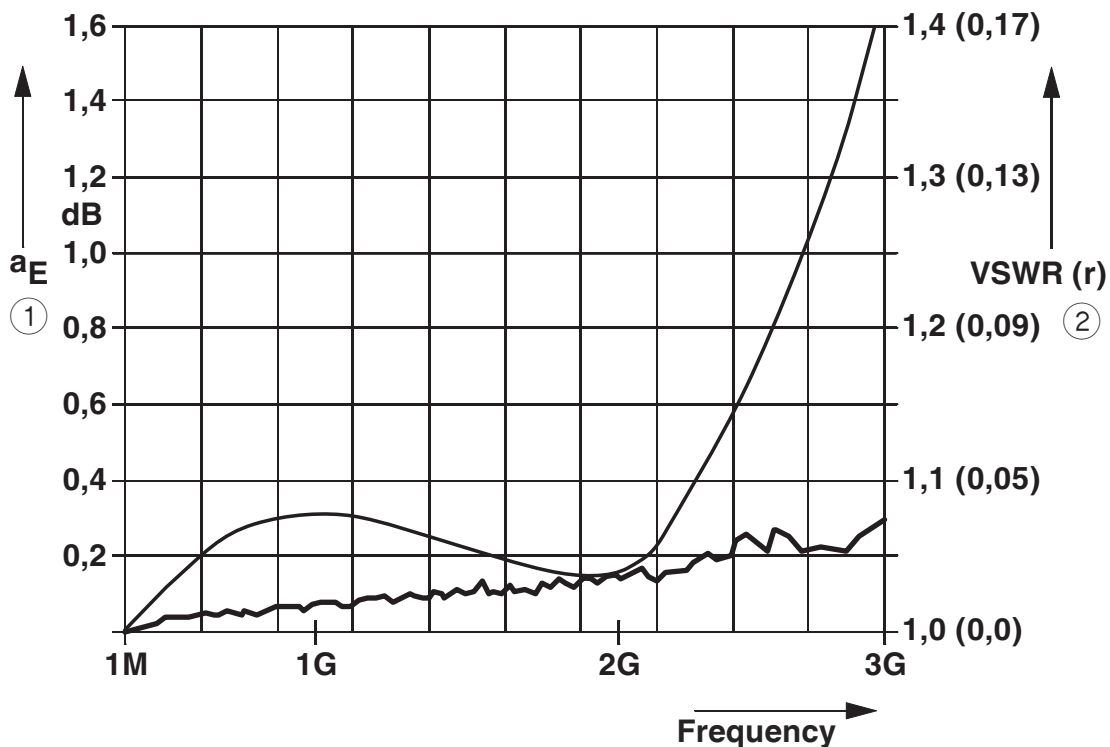
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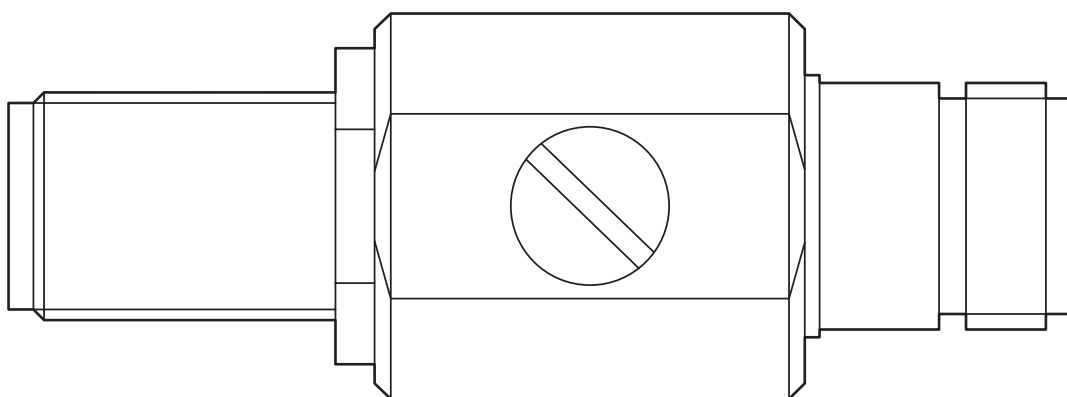
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Diagram



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

Product drawing



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Approvals



EAC

Approval ID: RU C-DE.*09.B.00169



UL Listed

Approval ID: FILE E 138168



UL Listed

Approval ID: FILE E 362540

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	280 V	5 A	-	-



cUL Listed

Approval ID: FILE E 333250

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	280 V	5 A	-	-



UL Listed

Approval ID: FILE E 333250

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	280 V	5 A	-	-

cULus Listed

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Classifications

ECLASS

ECLASS-10.0.1	27130807
ECLASS-9.0	27130807
ECLASS-11.0	27130807

ETIM

ETIM 8.0	EC000943
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UNSPSC

UNSPSC 21.0	39121600
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

Mounting plate

Mounting plate - CN-UB/MP - 2818135

<https://www.phoenixcontact.com/gb/products/2818135>

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



Mounting plate

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

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



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Gas-filled surge arrester

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

<https://www.phoenixcontact.com/gb/products/2818203>



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

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