

# CN-LAMBDA/4-0.47-BB - Surge protection device



2800021

<https://www.phoenixcontact.com/us/products/2800021>

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Attachment plug with Lambda/4 technology as surge protection for coaxial signal interfaces.  
Connection: N connectors socket-socket

## Your advantages

- Easy installation with system-compliant connection
- Use under extreme ambient conditions with robust design
- Service-friendly with maintenance-free protective circuit
- Exceptional protective properties with Lambda/4 technology

## Commercial data

Item number	2800021
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	CL26
Product key	CL3312
Catalog page	Page 202 (C-4-2019)
GTIN	4046356367943
Weight per piece (including packing)	193.8 g
Weight per piece (excluding packing)	187.7 g
Customs tariff number	85363010
Country of origin	US

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## Technical data

### Product properties

IEC test classification	C2
	C3
	D1
VDE requirement class	C2
	C3
	D1
Type	Attachment plug
Product type	Surge protection for transceiver systems
Number of positions	1
Surge protection fault message	none

### Connection data

Connection method	N Connector
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### Dimensions

Width	32 mm
Height	32 mm
Depth	83 mm

### Material specifications

Color	Nickel
Seal material	Silicon
Housing surface material	Guard plate (TM)
Housing material	Brass (CuZn)
Inner conductor material	BeCu
Inner conductor surface material	Gold
Insulation body material	PTFE

### Mechanical properties

#### Mechanical data

Open side panel	No
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### Protective circuit

Direction of action	Line-Shield/Earth Ground
Rated current	5 A (25 °C)
Nominal discharge current $I_n$ (8/20) $\mu$ s (line-ground)	20 kA
Nominal discharge current $I_n$ (8/20) $\mu$ s (line-shield)	20 kA
Pulse discharge current $I_{imp}$ (10/350) $\mu$ s	$\leq 15$ kA
Total discharge current $I_{total}$ (8/20) $\mu$ s	30 kA
Total discharge current $I_{total}$ (10/350) $\mu$ s	15 kA

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Max. discharge current $I_{\max}$ (8/20) $\mu\text{s}$ maximum (line-earth)	30 kA
Max. discharge current $I_{\max}$ (8/20) $\mu\text{s}$ maximum (line-shield)	30 kA
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-earth) spike	$\leq 55 \text{ V}$ (6 kV / 3 kA)
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-shield) spike	$\leq 55 \text{ V}$ (6 kV / 3 kA)
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-earth) static	$\leq 55 \text{ V}$ (6 kV / 3 kA)
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-shield) static	$\leq 55 \text{ V}$ (6 kV / 3 kA)
Voltage protection level $U_p$ (line-earth)	$\leq 95 \text{ V}$ (C2 - 10 kV / 5 kA)
Voltage protection level $U_p$ (line-shield)	$\leq 95 \text{ V}$ (C2 - 10 kV / 5 kA)
Input attenuation aE, asym.	typ. 0.05 dB ( $\leq 0.10 \text{ dB}$ )
Frequency range	380 MHz ... 470 MHz
Voltage standing wave ratio VSWR in a 50 $\Omega$ system	typ. 1.05 ( $\leq 1,15$ )
Permissible HF power $P_{\max}$ at VSWR = xx (50 ohm system)	$\leq 800 \text{ W}$ $\leq 4 \text{ kW}$ (peak)
Surge protection fault message	none
Impulse durability (line-earth)	C2 - 10 kV / 5 kA D1 - 2.5 kA
Impulse durability (line-shield)	C2 - 10 kV/5 kA D1 - 2.5 kA

## 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

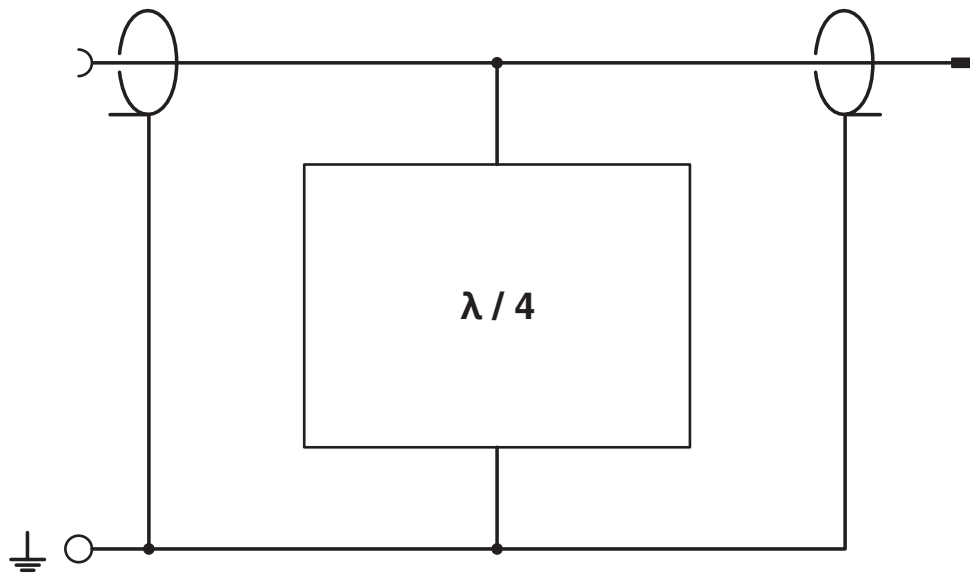
Standards/regulations	IEC 61643-21
	IEC 61643-21
Standards/specifications	IEC 61643-21
Note	2005

## Mounting

Mounting type	Connection-specific intermediate plugging
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## Drawings

Circuit diagram



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## Approvals

📄 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2800021>



**EAC**

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

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## Classifications

### ECLASS

ECLASS-11.0	27130807
ECLASS-13.0	27171504

### ETIM

ETIM 8.0	EC000943
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### UNSPSC

UNSPSC 21.0	39121600
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## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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## Accessories

### CN-UB/MP-90DEG-50 - Mounting panel

2803137

<https://www.phoenixcontact.com/us/products/2803137>



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

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### RAD-ADP-N/M-SMA/F - Adapter

2917036

<https://www.phoenixcontact.com/us/products/2917036>



Antenna adapter, frequency range: 0.3 GHz ... 6 GHz, connection: N (male) -> SMA (female)



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## RAD-PIG-EF316-N-RSMA - Antenna cable

2701402

<https://www.phoenixcontact.com/us/products/2701402>

Antenna cable for control cabinet feed-through, outside diameter: 3.2 mm (0.126 in.), inner conductor: stranded, attenuation: 0.6 / 0.9 / 1.4 dB at 0.9 / 2.4 / 5.8 GHz, connection: N (female) -> RSMA (male), cable length: 0.5 m (1.6 ft.)



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