

## Surge protection device - D-UFB-PB - 2880642

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)

Fine surge protection in a 9-pos. D-SUB plug for PROFIBUS-DP applications with a transmission speed of up to 12 Mbps.




### Your advantages

- Integrated termination resistor
- Data transmission speed up to 12 Mbps
- Direct use at the interface



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 048989
GTIN	4046356048989

### Technical data

#### Dimensions

Height	58 mm
Width	44.5 mm
Depth	16.6 mm

#### Ambient conditions

Ambient temperature (operation)	-20 °C ... 75 °C
Ambient temperature (storage/transport)	-20 °C ... 75 °C
Degree of protection	IP40

#### General

Housing material	ABS, metal-plated
Color	silver
Standards for clearances and creepage distances	IEC 60664-1
	DIN VDE 0110-1

# Surge protection device - D-UFB-PB - 2880642

## Technical data

### General

Overvoltage category	II
Degree of pollution	2
Mounting type	Direct assembly on the device interface
Type	Connecting plug
Number of positions	4
Direction of action	Line-Line & Line-Earth Ground

### Protective circuit

IEC test classification	C1
	C3
	B2
VDE requirement class	C1
	C3
	B2
Maximum continuous voltage $U_C$	5.2 V DC
Rated current	250 mA (25 °C)
Operating effective current $I_C$ at $U_C$	$\leq 100 \mu\text{A}$
Residual current $I_{PE}$	$\leq 100 \mu\text{A}$
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$ (line-line)	350 A
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$ (line-earth)	350 A
Total discharge current $I_{total}$ (8/20) $\mu\text{s}$	350 A
Max. discharge current $I_{max}$ (8/20) $\mu\text{s}$ maximum (line-line)	350 A
Max. discharge current $I_{max}$ (8/20) $\mu\text{s}$ maximum (line-earth)	350 A
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-line) spike	$\leq 20$ V
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-earth) spike	$\leq 20$ V
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-line) static	$\leq 14$ V
Output voltage limitation at 1 kV/ $\mu\text{s}$ (line-earth) static	$\leq 14$ V
Output voltage limitation (10/700) $\mu\text{s}$ (line-line)	$\leq 15$ V ( $U_0=4$ kV)
Output voltage limitation (10/700) $\mu\text{s}$ (line-earth)	$\leq 15$ V ( $U_0=4$ kV)
Residual voltage at $I_n$ (line-line)	$\leq 25$ V
Residual voltage at $I_n$ (line-earth)	$\leq 25$ V
Voltage protection level $U_p$ (line-line)	$\leq 25$ V (C1 - 500 V / 250 A)
	$\leq 15$ V (C3 - 25 A)
	$\leq 15$ V (B2 - 4 kV / 100 A)
Voltage protection level $U_p$ (line-earth)	$\leq 25$ V (C1 - 500 V / 250 A)
	$\leq 15$ V (C3 - 25 A)
	$\leq 15$ V (B2 - 4 kV / 100 A)
Response time $t_A$ (line-line)	$\leq 500$ ns
Response time $t_A$ (line-earth)	$\leq 500$ ns
Cut-off frequency $f_g$ (3 dB), sym. in 100 Ohm system	typ. 70 MHz

# Surge protection device - D-UFB-PB - 2880642

## Technical data

### Protective circuit

Inductivity in series	0.11 µH
Surge protection fault message	none
Impulse durability (line-line)	C1 - 500 V / 250 A C3 - 2 kV / 25 A
Impulse durability (line-earth)	C1 - 500 V / 250 A C3 - 2 kV/25 A

### Connection data

Connection method	Screw connection & D-SUB-9
Connection method IN	Screw terminal blocks
Connection method OUT	D-SUB-9 connector
Connection technology	2-wire (shielded)
Screw thread	M2
Tightening torque	0.25 Nm
Stripping length	5 mm
Conductor cross section flexible	0.14 mm² ... 1.5 mm²
Conductor cross section solid	0.14 mm² ... 1.5 mm²
Conductor cross section AWG	26 ... 16

### Connection, equipotential bonding

Connection method	PVC Litz wire, 1.0 mm², 0.5 m length
-------------------	--------------------------------------

### Standards and Regulations

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

### Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Approvals

Approvals

---

Approvals

UL Listed / EAC

---

Ex Approvals

---

## Surge protection device - D-UFB-PB - 2880642

### Approvals

#### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 138168
-----------	---	---	---------------

EAC			RU C- DE.A*30.B01561
-----	---	--	-------------------------

Phoenix Contact 2019 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>