

## Surge protection device - DT-UFB-485/BS - 2920612

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>)




9-pos. D-SUB attachment plug with surge protection for RS-485 interfaces. Can alternatively be snapped onto DIN rails.

### Why buy this product

- Adapter type
- 9-pos. D-SUB connection
- DIN rail mounting possible by removing the cap



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 155120
GTIN	4046356155120
Weight per Piece (excluding packing)	305.200 g
Weight per piece (including packing)	320.500 g
Custom tariff number	85363010
Country of origin	Germany
Sales Key	K1 - Overvoltage Protect.

### Technical data

#### Dimensions

Height	108 mm
Width	25 mm
Depth	63 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Degree of protection	IP20

#### General

# Surge protection device - DT-UFB-485/BS - 2920612

## Technical data

### General

Housing material	Zinc die-cast
Color	silver/black
Standards for clearances and creepage distances	IEC 60664-1
	VDE 0110-1
Mounting type	Connection-specific attachment plug and DIN rail, 35 mm
Type	Attachment plug for DIN rail mounting
Number of positions	5
Direction of action	Line-Line & Line-Ground/Shield

### Protective circuit

IEC test classification	B2
	C1
	C2
	C3
	D1
VDE requirement class	B2
	C1
	C2
	C3
	D1
Maximum continuous voltage $U_C$	12 V DC
Rated current	$\leq 380$ mA (25 °C)
Operating effective current $I_C$ at $U_C$	$\leq 1$ $\mu$ A
Residual current $I_{PE}$	$\leq 5$ $\mu$ A
Nominal discharge current $I_n$ (8/20) $\mu$ s (Core-Core)	$\leq 5$ kA
Nominal discharge current $I_n$ (8/20) $\mu$ s (core-earth)	$\leq 5$ kA
Total discharge current $I_{total}$ (8/20) $\mu$ s	10 kA
Output voltage limitation at 1 kV/ $\mu$ s (core-earth) spike	$\leq 700$ V
Output voltage limitation at 1 kV/ $\mu$ s (core-core) static	$\leq 25$ V
Output voltage limitation at 1 kV/ $\mu$ s (core-earth) static	$\leq 700$ V
Output voltage limitation at 1 kV/ $\mu$ s (core-GND) static	$\leq 25$ V
Residual voltage at $I_n$ (conductor-conductor)	$\leq 25$ V
Residual voltage at $I_n$ (conductor-ground)	$\leq 55$ V
Residual voltage at $I_n$ (conductor-GND)	$\leq 25$ V
Voltage protection level $U_p$ (core-core)	$\leq 30$ V (B2 - 100 A)
	$\leq 30$ V (C1 - 500 A)
	$\leq 40$ V (C2 - 5 kA)
Voltage protection level $U_p$ (core-ground)	$\leq 700$ V (B2 - 100 A)
	$\leq 700$ V (C1 - 500 A)
	$\leq 750$ V (C2 - 5 kA)
Response time $t_A$ (core-core)	$\leq 100$ ns

# Surge protection device - DT-UFB-485/BS - 2920612

## Technical data

### Protective circuit

Response time $t_A$ (core-earth)	$\leq 100$ ns
Input attenuation $a_E$ , sym.	typ. 0.3 dB ( $\leq 30$ MHz)
	typ. 0.3 dB ( $\leq 7$ MHz / 150 $\Omega$ )
	typ. 0.3 dB ( $\leq 2$ MHz / 600 $\Omega$ )
Cut-off frequency $f_g$ (3 dB), sym. in 100 Ohm system	typ. 50 MHz
Resistance in series	3.3 $\Omega$ 10 %
Surge protection fault message	none
Impulse durability (conductor-conductor)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	B2 - 4 kV/100 A
Impulse durability (conductor-ground)	B2 - 4 kV/100 A
	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	D1 - 1 kA

### Connection data

Connection method	D-SUB-9
Connection method IN	D-SUB-9 socket
Connection method OUT	D-SUB-9 connector

### Connection, equipotential bonding

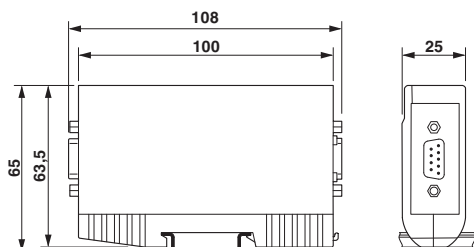
Connection method	Cable connection
-------------------	------------------

### Standards and Regulations

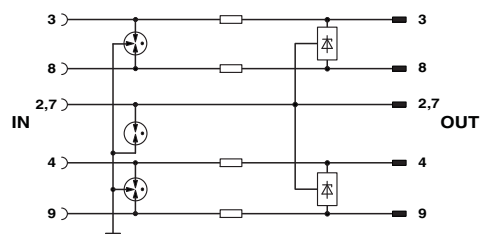
Standards/regulations	IEC 61643-21
	DIN EN 61643-21
Standards/specifications	DIN EN 61643-21 2002

## Drawings

Dimensional drawing



Circuit diagram



# Surge protection device - DT-UFB-485/BS - 2920612

## Classifications

### eCl@ss

eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130807
eCl@ss 7.0	27130807
eCl@ss 8.0	27130807
eCl@ss 9.0	27130807

### ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943
ETIM 6.0	EC000943

### UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

## Approvals

### Approvals

---

Approvals


EAC / EAC

---

Ex Approvals

---

### Approval details

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

## Surge protection device - DT-UFB-485/BS - 2920612

### Approvals

EAC



EAC-Zulassung

### Accessories

#### Accessories

#### Data cable preassembled

D-SUB cable - VS-09-DSUB-20-LI-1,0 - 1656233



Assembled D-SUB cable, shielded, 9-pos., stranded (7-wire), cable color: RAL 7000 (gray), secured using 4-40 UNC thread, IP20 protection, head 1 with socket shell 1 and straight cable outlet, head 2 with pin shell 1 and straight cable outlet, length: 1 m