

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

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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	0
Minimum order quantity	1
Catalog page	Page 147 (TT-2011)
GTIN	 4 046356 155120
Custom tariff number	85363010
Country of origin	GERMANY

### Technical data

#### General

Housing material	Zinc die-cast
Color	silver/black
Standards for air and creepage distances	IEC 60664-1
Standards for air and creepage distances	VDE 0110-1
Total surge current (8/20) $\mu$ s	10 kA
Ambient temperature (operation)	-40 °C ... 85 °C
Mounting type	Connection-specific attachment plug and DIN rail, 35 mm
Design	Attachment plug for DIN rail mounting
Number of positions	5
Degree of protection	IP20
Direction of action	Line-Line & Line-Ground/Shield
Width	25 mm
Height	110 mm

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### Technical data

#### General

Depth	63 mm
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#### Protective circuit

IEC category	B2
IEC category	C1
IEC category	C2
IEC category	C3
IEC category	D1
VDE requirement class	B2
VDE requirement class	C1
VDE requirement class	C2
VDE requirement class	C3
VDE requirement class	D1
Maximum continuous operating voltage UC	12 V DC
Maximum continuous voltage UC (wire-wire)	12 V DC
Maximum continuous voltage UC (wire-ground)	90 V DC
Nominal current I <sub>N</sub>	≤ 380 mA (25°C)
Operating effective current I <sub>C</sub> at UC	≤ 1 μA
Ground conductor current I <sub>PE</sub>	≤ 5 μA
Nominal discharge surge current I <sub>n</sub> (8/20) μs (Core-Core)	≤ 5 kA
Nominal discharge surge current I <sub>n</sub> (8/20) μs (Core-Earth)	≤ 5 kA
Total surge current (8/20) μs	10 kA
Output voltage limitation at 1 kV/μs (Core-Earth) spike	≤ 700 V
Output voltage limitation at 1 kV/μs (Core-Core) static	≤ 25 V
Output voltage limitation at 1 kV/μs (Core-Earth) static	≤ 700 V
Output voltage limitation at 1 kV/μs (Core-GND) static	≤ 25 V
Residual voltage at I <sub>n</sub> , (conductor-conductor)	≤ 25 V
Residual voltage at I <sub>n</sub> , (conductor-ground)	≤ 55 V
Residual voltage at I <sub>n</sub> , (conductor-GND)	≤ 25 V
Protection level UP (Core-Core)	≤ 30 V (B2 - 100 A)
Protection level UP (Core-Core)	≤ 30 V (C1 - 500 A)
Protection level UP (Core-Core)	≤ 40 V (C2 - 5 kA)
Protection level UP (Core-Earth)	≤ 700 V (B2 - 100 A)
Protection level UP (Core-Earth)	≤ 700 V (C1 - 500 A)
Protection level UP (Core-Earth)	≤ 750 V (C2 - 5 kA)
Response time t <sub>A</sub> (Core-Core)	≤ 100 ns
Response time t <sub>A</sub> (Core-Earth)	≤ 100 ns
Input attenuation a <sub>E</sub> , sym.	Typ. 0.3 dB (≤ 30 MHz)
Input attenuation a <sub>E</sub> , sym.	Typ. 0.3 dB (≤ 7 MHz / 150 Ω)
Input attenuation a <sub>E</sub> , sym.	Typ. 0.3 dB (≤ 2 MHz / 600 Ω)
Cut-off frequency f <sub>g</sub> (3 dB), sym. in 100 Ohm system	Typ. 50 MHz
Resistance in series	3.3 Ω 10 %
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C1 (1 kV / 500 A)

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## Technical data

### Protective circuit

Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C2 (10 kV/5 kA)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	B2 (4 kV / 100 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	B2 (4 kV / 100 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C1 (1 kV / 500 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (10 kV/5 kA)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	D1 (1 kA)

### Connection data

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

### Connection, equipotential bonding

Connection method	Cable connection
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### Connection, protective circuit

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

## Classifications

### eclass

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

### etim

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943

### unspsc

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

## Approvals

### Approvals

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## Approvals

Approvals

GOST / GOST

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Ex Approvals

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Approvals submitted

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## Approval details



## Accessories

### Accessories

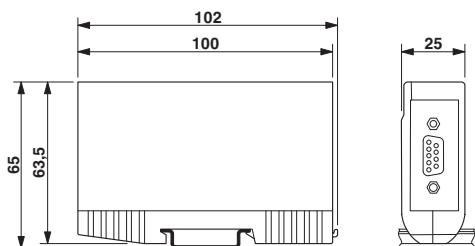
D-SUB cable - VS-09-DSUB-20-LI-1,0 - 1656233



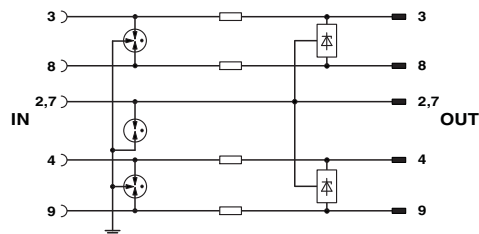
Assembled D-SUB cable shielded, 9-pos., stranded (7-wire), cable color RAL 7000 (gray), IP20 degree of protection, head 1 with socket shell 1 and straight cable outlet, head 2 with pin shell 1 and straight cable outlet, length: 1 m

## Drawings

### Dimensioned drawing



### Circuit diagram





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