

DT-LAN-CAT.6+ - Surge protection device



2881007

<https://www.phoenixcontact.com/nl/products/2881007>

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Surge protection in accordance with Class E_A (CAT6_A), for Gigabit Ethernet (up to 10 Gbps), token ring, FDDI/CDDI, ISDN, and DS1. Suitable for Power over Ethernet (PoE++ / 4PPoE) "Mode A" and "Mode B". RJ45 attachment plug with separate grounding cable and ground connection snap-on foot for NS 35 DIN rails.

Your advantages

- Can be used in applications up to 10 Gbps with adapted protective circuit
- High power transmission with PoE++ / 4PPoE support
- Easy network integration via RJ45 jacks
- Can be installed in a control cabinet by removing the ground connection adapter
- Suitable for category 6 high-speed data networks

Commercial data

Item number	2881007
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL3112
Product key	CL3112
GTIN	4046356151900
Weight per piece (including packing)	316 g
Weight per piece (excluding packing)	314,1 g
Customs tariff number	85363010
Country of origin	DE

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Technical data

Product properties

Product family	DATATRAB
IEC test classification	B2
	C1
	C2
	C3
	D1
Type	Attachment plug for DIN rail mounting
Number of positions	8
Surge protection fault message	none
Wire pairs per module	4

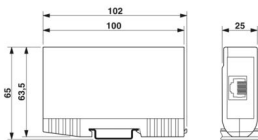
Insulation characteristics

Overvoltage category	II
Pollution degree	2

Connection data

Connection method	RJ45
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Dimensions

Dimensional drawing	
Width	25 mm
Height	102 mm
Depth	63.5 mm

Material specifications

Color	silver-colored
Housing material	Die-cast zinc

Mechanical properties

Mechanical data

Open side panel	No
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Protective circuit

Direction of action	Line-Line & Line-Ground/Shield
Maximum continuous voltage U_C (line-line)	≤ 3.3 V DC (± 60 V DC/PoE+)

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Rated current	≤ 1.5 A (25 °C)
Operating effective current I_C at U_C	≤ 1 μA
Protective conductor current I_{PE}	≤ 400 μA
Nominal discharge current I_n (8/20) μs (line-line)	100 A
Nominal discharge current I_n (8/20) μs (line-ground)	2 kA (per signal pair)
Pulse discharge current I_{imp} (10/350) μs (line-earth)	1 kA
Total discharge current I_{Total} (8/20) μs	10 kA
Nominal pulse current I_{an} (10/700) μs (line-line)	≤ 40 A
Nominal pulse current I_{an} (10/700) μs (line-earth)	≤ 160 A
Output voltage limitation at 1 kV/μs (line-line) spike	≤ 85 V (PoE)
Output voltage limitation at 1 kV/μs (line-earth) spike	≤ 700 V
Output voltage limitation at 1 kV/μs (line-line) static	≤ 9 V
Output voltage limitation at 1 kV/μs (line-earth) static	≤ 700 V
Residual voltage at I_n (conductor-conductor)	≤ 15 V
	≤ 100 V (PoE)
Voltage protection level U_p (line-line)	≤ 9 V (B2 - 1 kV / 25 A)
	≤ 100 V (B2 - 1 kV / 25 A - PoE)
	≤ 12 V (C3 - 20 A)
Voltage protection level U_p (line-earth)	≤ 900 V (B2 - 4 kV / 100 A)
	≤ 700 V (C2 - 4 kV / 2 kA)
	≤ 1 kV (C3 - 80 A)
Response time t_A (line-line)	≤ 1 ns
Response time t_A (line-earth)	≤ 100 ns
Input attenuation aE, sym.	≤ 1 dB (up to 100 MHz/direct measuring)
	≤ 1 dB (up to 250 MHz/direct measuring)
	≤ 3 dB (up to 500 MHz/direct measuring)
Near-end crosstalk attenuation	≥ 35 dB (250 MHz/100 Ω/link)
	≥ 45 dB (100 MHz / 100 Ω / Link)
	≥ 27 dB (500 MHz / 100 Ω / Link)
	≥ 39 dB (250 MHz/100 Ω/direct measuring)
Capacity (Core-Core)	typ. 12 pF (f= 1 MHz / VR= 0 V)
Capacity (Core-Earth)	typ. 2 pF (f= 1 MHz / VR= 0 V)
Surge protection fault message	none
Impulse durability (line-line)	B2 - 1 kV / 25 A
	C3 - 20 A
Impulse durability (line-earth)	B2 - 4 kV / 100 A
	C2 - 4 kV / 2 kA
	C3 - 80 A
	D1 - 1 kA

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
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Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 70 °C
Altitude	≤ 4000 m (amsl)
Permissible humidity (operation)	5 % ... 85 %

Standards and regulations

Standards/specifications	IEC 61643-21
Note	2002
Standards/specifications	EN 50173-1
Note	2002
Standards/specifications	ISO/IEC 11801-Am.1
Note	2006

Mounting

Mounting type	Connection-specific attachment plug and DIN rail, 35 mm
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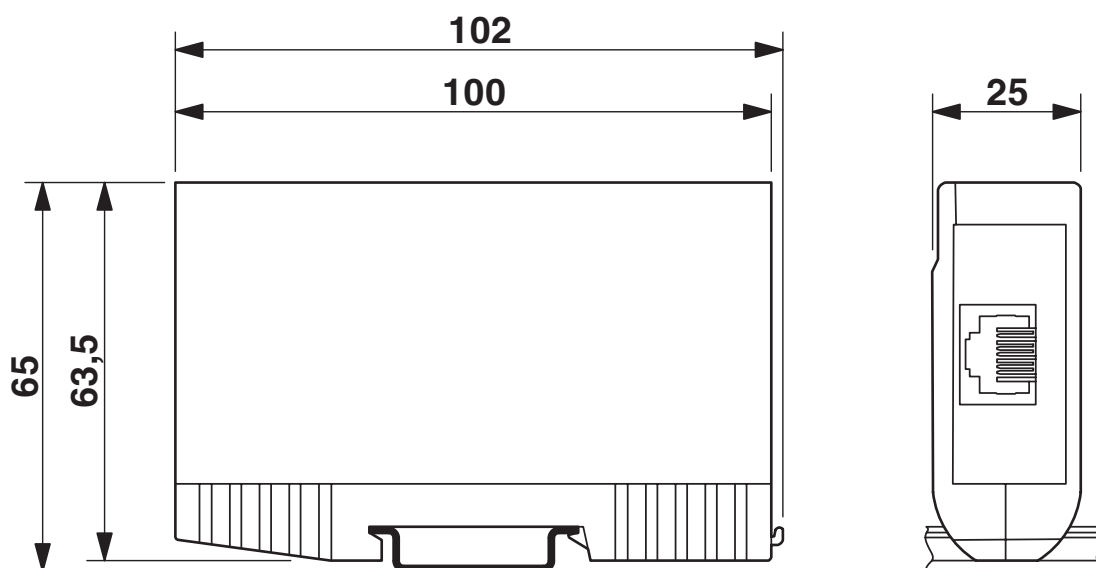
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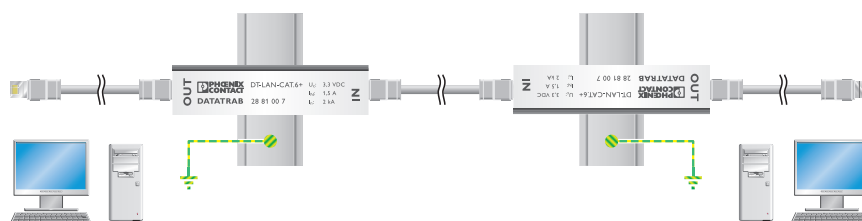


Drawings

Dimensional drawing



Application drawing

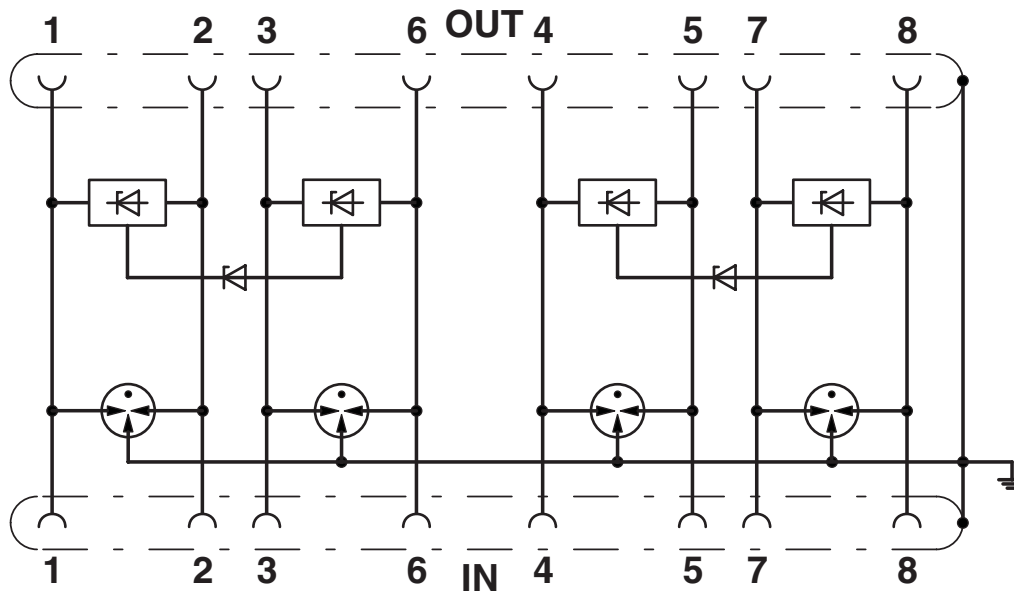


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Circuit diagram



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Approvals

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UL Listed

Approval ID: FILE E 138168

UAE-RoHS

Approval ID: 23-10-88352

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Classifications

ECLASS

ECLASS-13.0	27171503
ECLASS-15.0	27171503

ETIM

ETIM 9.0	EC000943
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UNSPSC

UNSPSC 21.0	39121600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(a)-I, 7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	0151641f-8d9c-4558-8f99-5ef76a28eeb6

EF3.1 Climate Change

CO2e kg	5,26 kg CO2e
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