

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



2881007

<https://www.phoenixcontact.com/pc/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

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Commercial Data

Item number	2881007
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	CL3112
Catalog Page	Page 142 (C-4-2017)
GTIN	4046356151900
Weight per Piece (including packing)	322.3 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

IEC test classification	B2
	C1
	C2
	C3
	D1
Type	Attachment plug for DIN rail mounting
Product type	Surge protection for information technology
Number of positions	8
Wire pairs per module	4

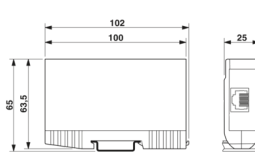
Insulation characteristics

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/black
Housing material	Zinc die-cast

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)
Rated current	≤ 1.5 A (25 °C)

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Operating effective current I_C at U_C	$\leq 1 \mu\text{A}$
Residual current I_{PE}	$\leq 400 \mu\text{A}$
Nominal discharge current I_n (8/20) μs (line-line)	100 A
Nominal discharge surge current I_n (8/20) μs (Core-Earth)	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)	$\leq 40 \text{ A}$
Nominal pulse current I_{an} (10/700) μs (line-earth)	$\leq 160 \text{ A}$
Output voltage limitation at 1 kV/ μs (line-line) spike	$\leq 85 \text{ V}$ (PoE)
Output voltage limitation at 1 kV/ μs (line-earth) spike	$\leq 700 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-line) static	$\leq 9 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-earth) static	$\leq 700 \text{ V}$
Residual voltage at I_n (conductor-conductor)	$\leq 15 \text{ V}$
Voltage protection level U_p (line-line)	$\leq 9 \text{ V}$ (B2 - 1 kV / 25 A)
	$\leq 100 \text{ V}$ (B2 - 1 kV / 25 A - PoE)
	$\leq 12 \text{ V}$ (C3 - 20 A)
Voltage protection level U_p (line-earth)	$\leq 900 \text{ V}$ (B2 - 4 kV / 100 A)
	$\leq 700 \text{ V}$ (C2 - 4 kV / 2 kA)
	$\leq 1 \text{ kV}$ (C3 - 80 A)
Response time t_A (line-line)	$\leq 1 \text{ ns}$
Response time t_A (line-earth)	$\leq 100 \text{ ns}$
Input attenuation aE, sym.	$\leq 1 \text{ dB}$ (up to 100 MHz/direct measuring)
	$\leq 1 \text{ dB}$ (up to 250 MHz/direct measuring)
	$\leq 3 \text{ dB}$ (up to 500 MHz/direct measuring)
Near-end crosstalk attenuation	$\geq 35 \text{ dB}$ (250 MHz/100 Ω /link)
	$\geq 45 \text{ dB}$ (100 MHz / 100 Ω / Link)
	$\geq 27 \text{ dB}$ (500 MHz / 100 Ω / Link)
	$\geq 39 \text{ dB}$ (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
Ambient temperature (operation)	-40 °C ... 70 °C

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Ambient temperature (storage/transport)	-40 °C ... 70 °C
Altitude	≤ 4000 m (amsl (above mean sea level))
Permissible humidity (operation)	5 % ... 85 %

Standards and regulations

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

Mounting

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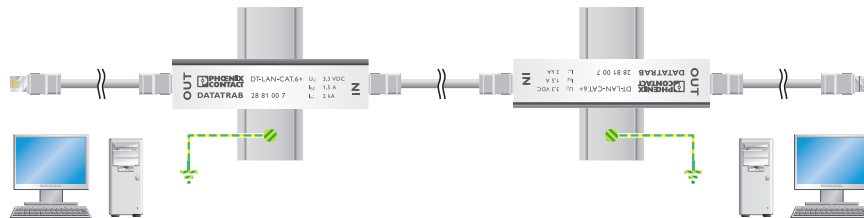
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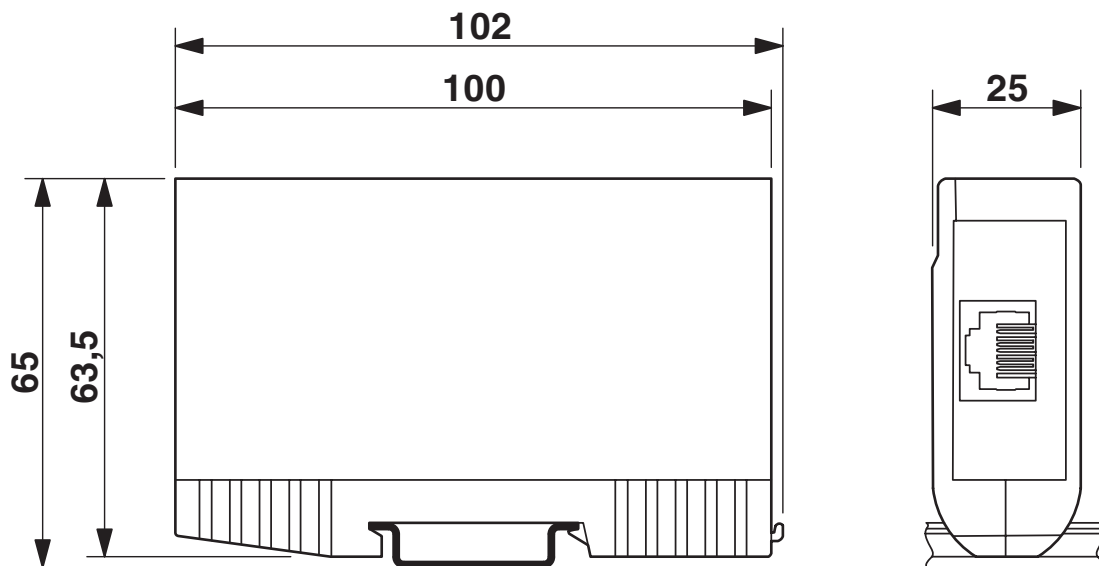
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Drawings

Application drawing



Dimensional drawing



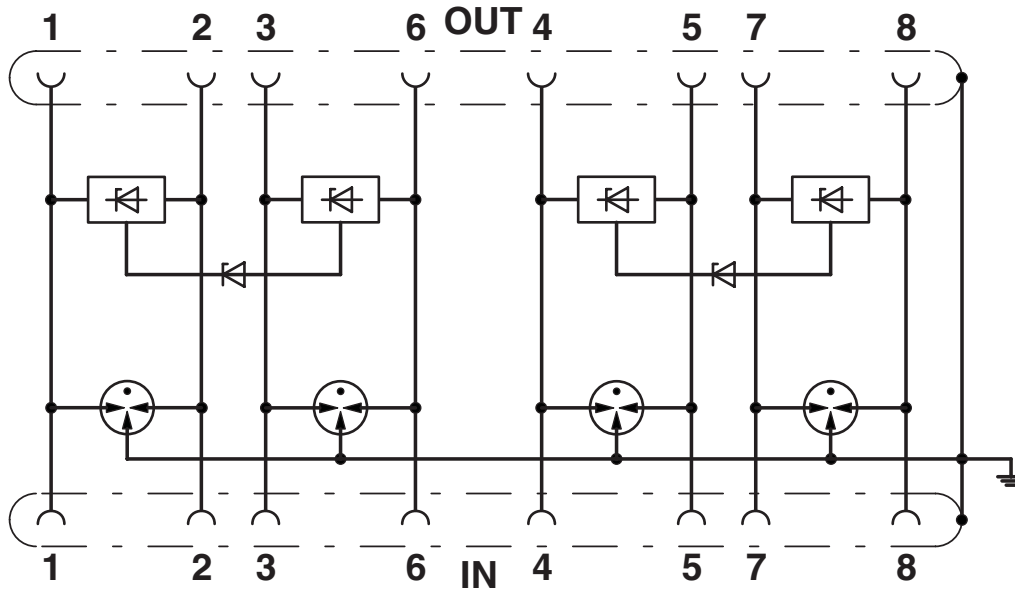
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Circuit diagram



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Approvals



EAC

Approval ID: EAC-Zulassung



EAC

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



UL Listed

Approval ID: FILE E 138168

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Classifications

ECLASS

ECLASS-9.0	27130807
ECLASS-10.0.1	27130807
ECLASS-11.0	27130807

ETIM

ETIM 8.0	EC000943
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UNSPSC

UNSPSC 21.0	39121600
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Environmental Product Compliance

REACH SVHC

Lead 7439-92-1

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Accessories

Patch cable

Patch cable - FL CAT6 PATCH 0,5 - 2891288

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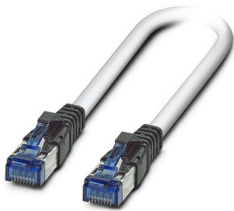


Patch cable, CAT6, pre-assembled, 0.5 m

Patch cable

Patch cable - FL CAT6 PATCH 1,0 - 2891385

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Patch cable, CAT6, pre-assembled, 1.0 m

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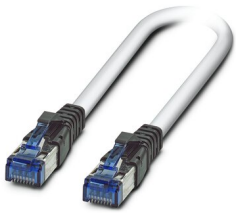
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Patch cable

Patch cable - FL CAT6 PATCH 2,0 - 2891589

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Patch cable, CAT6, pre-assembled, 2.0 m

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