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Surge protection device - S-PT-2XEX-48DC - 2800038

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Surge protection for two floating signal circuits in screw-on module with IP67 protection for sensor heads, connection M20 x 1.5. Tested in acc. with the protection types in Ex areas Ex d / Ex tD / Ex ia IIC / Ex iaD.

Why buy this product

- Arresters in hexagonal pipe with various outer threads



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 410977

Technical data

Dimensions

Height	28 mm
Width	28 mm
Depth	79 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 80 °C (non-Ex)
Degree of protection	IP67

General

Housing material	High-grade steel
Color	silver
Standards for clearances and creepage distances	IEC 60664-1
	IEC 60079-11
Mounting type	M20
Type	Screw-in module
Number of positions	4

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Technical data

General

Direction of action	Line-Line & Line-Earth Ground
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Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	48 V DC
Maximum continuous voltage U_C	53 V DC
	37 V AC
Maximum continuous voltage U_C (wire-wire)	53 V DC
	37 V AC
Residual current I_{PE}	$\leq 2 \mu A$
Nominal discharge current I_n (8/20) μs (Core-Core)	170 A
Nominal discharge current I_n (8/20) μs (Core-Earth)	10 kA
Total surge current (8/20) μs	20 kA
Total surge current (10/350) μs	2 kA
Nominal pulse current I_{an} (10/1000) μs (Core-Core)	34 A
Impulse discharge current (10/350) μs , peak value I_{imp}	1 kA
Output voltage limitation at 1 kV/ μs (Core-Core) spike	$\leq 85 V$
Output voltage limitation at 1 kV/ μs (Core-Earth) spike	$\leq 1.1 kV$
Output voltage limitation at 1 kV/ μs (Core-Core) static	$\leq 80 V$
Voltage protection level U_p (core-core)	$\leq 80 V$ (C3 - 10 A)
Voltage protection level U_p (core-ground)	$\leq 1.1 kV$ (C3 - 100 A)
	$\leq 1.1 kV$ (C1 - 500 A)
	$\leq 1.2 kV$ (C2 - 10 kV / 5 kA)
Response time t_A (Core-Core)	$\leq 1 ns$
Response time t_A (Core-Earth)	$\leq 100 ns$
Input attenuation a_E , sym.	typ. 0.1 dB (1 MHz / 50 Ω)
	typ. 0.1 dB (500 kHz / 150 Ω)
Cut-off frequency f_g (3 dB), sym. in 50 Ohm system	typ. 6 MHz
Cut-off frequency f_g (3 dB), sym. in 150 Ohm system	typ. 3 MHz
Capacity (Core-Core)	typ. 1 nF
Capacity (Core-Earth)	typ. 5 pF
Surge protection fault message	None
Impulse durability (conductor-conductor)	C3 - 10 A
Impulse durability (conductor-ground)	C1 - 1 kV/500 A
	C2 - 10 kV/5 kA
	C3 - 100 A
	D1 - 1kA
Alternating current carrying capacity (conductor-ground)	10 A - 1 s

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Technical data

Connection data

Connection method	Individual wires
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Standards and Regulations

Standards/regulations	EN 61643-21
	EN 60079-0
	EN 60079-1
	EN 60079-11
	EN 60079-26
	EN 61241-0
	EN 61241-1
	EN 61241-11

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

UNSPSC

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

Approvals

Approvals

Surge protection device - S-PT-2XEX-48DC - 2800038

Approvals

Approvals

EAC

Ex Approvals

IECEX / ATEX

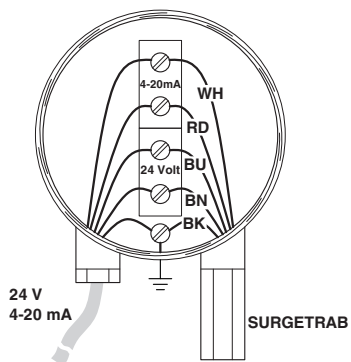
Approvals submitted

Approval details

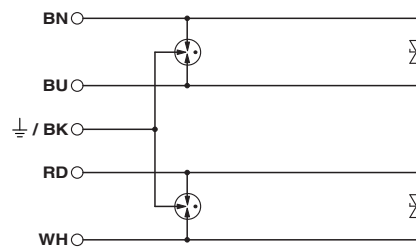
EAC

Drawings

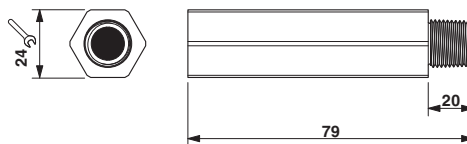
Application drawing



Circuit diagram



Dimensional drawing



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