

Surge protection device - S-PT-EX-24DC-1/2" - 2800035

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Surge protection for one floating signal circuit in screw-on module with IP67 protection for sensor heads, connection 1/2-inch 14 NPT. 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	0
Minimum order quantity	1
Catalog page	Page 115 (TT-2011)
GTIN	 4 046356 411011
Custom tariff number	85363010
Country of origin	GERMANY

Technical data

General

Housing material	High-grade steel
Color	silver
Standards for air and creepage distances	IEC 60664-1
Standards for air and creepage distances	IEC 60079-11
Total surge current (8/20) µs	20 kA
Total surge current (10/350) µs	2 kA
Ambient temperature (operation)	-25 °C ... 80 °C (non-EX)
Mounting type	1/2 inch NPT
Design	Screw-in module
Number of positions	2
Degree of protection	IP67
Direction of action	Line-Line & Line-Earth Ground
Width	28 mm
Height	28 mm
Depth	79 mm

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Protective circuit

IEC category	C1
IEC category	C2
IEC category	C3
IEC category	D1
Nominal voltage UN	24 V DC
Maximum continuous operating voltage UC	36 V DC
Maximum continuous operating voltage UC	25 V AC
Maximum continuous voltage UC (wire-wire)	36 V DC
Maximum continuous voltage UC (wire-wire)	25 V AC
Ground conductor current IPE	≤ 2 μA
Nominal discharge surge current In (8/20) μs (Core-Core)	260 A
Nominal discharge surge current In (8/20) μs (Core-Earth)	10 kA
Total surge current (8/20) μs	20 kA
Nominal pulse current Ian (10/1000) μs (Core-Core)	50 A
Lightning test current (10/350) μs, peak value limp	1 kA
Output voltage limitation at 1 kV/μs (Core-Core) spike	≤ 130 V
Output voltage limitation at 1 kV/μs (Core-Earth) spike	≤ 1.1 kV
Output voltage limitation at 1 kV/μs (Core-Core) static	≤ 60 V
Protection level UP (Core-Core)	≤ 65 V (C3 - 10 A)
Protection level UP (Core-Earth)	≤ 1.1 kV (C3 - 100 A)
Protection level UP (Core-Earth)	≤ 1.1 kV (C1 - 500 A)
Protection level UP (Core-Earth)	≤ 1.2 kV (C2 - 10 kV / 5 kA)
Response time tA (Core-Core)	≤ 1 ns
Response time tA (Core-Earth)	≤ 100 ns
Input attenuation aE, sym.	Typ. 0.1 dB (30 MHz / 50 Ω)
Input attenuation aE, sym.	Typ. 0.1 dB (6 MHz / 150 Ω)
Cut-off frequency fg (3 dB), sym. in 50 Ohm system	Typ. 70 MHz
Cut-off frequency fg (3 dB), sym. in 150 Ohm system	Typ. 70 MHz
Capacity (Core-Core)	Typ. 20 pF
Capacity (Core-Earth)	Typ. 5 pF
Resistance in series	0 Ω
Message: Surge protection fault	None
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C3 (25 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)	C3 (100 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	D1 - 1kA
Alternating current carrying capacity in acc. with IEC 61643-21 (Core-Earth)	10 A - 1 s

Connection data

Connection method	Individual wires
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Connection, protective circuit

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Connection, protective circuit

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

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

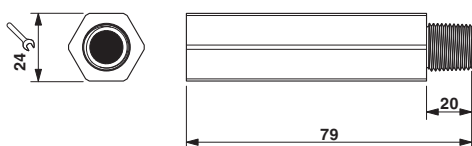
ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 5.0	EC000943

unspsc

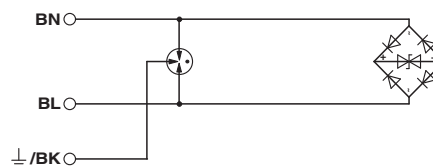
UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620

Drawings

Dimensioned drawing



Circuit diagram



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Application drawing

