

# S-PT-EX-24DC


Order No.: 2800034



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2800034>

Surge protection for one floating signal circuit in screw-on module with IP67 degree of 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.



Commercial data	
GTIN (EAN)	4 046356 411004 
sales group	J331
Pack	1 pcs.
Customs tariff	85363010
Catalog page information	Page 113 (TT-2009)

#### Product notes

WEEE/RoHS-compliant since:  
05/13/2008



<http://www.download.phoenixcontact.com>  
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

Technical data	
<b>General</b>	
Housing material	High-grade steel
Color	silver

Standards for air and creepage distances	IEC 60664-1
	IEC 60079-11
Total surge current (8/20) $\mu$ s	20 kA
Total surge current (10/350) $\mu$ s	2 kA
Ambient temperature (operation)	-25 °C ... 80 °C (non-EX)
Mounting type	M20
Design	Screw-in module
Number of positions	2
Degree of protection	IP67
Direction of action	Line-Line & Line-Earth Ground
Width	28.00 mm
Height	79.00 mm
Length	28.00 mm

**Protective circuit**

IEC category	C1
	C2
	C3
	D1
Nominal voltage $U_N$	24 V DC
Maximum continuous operating voltage $U_C$	36 V DC
	25 V AC
Maximum continuous voltage $U_C$ (wire-wire)	36 V DC
	25 V AC
Ground conductor current $I_{PE}$	$\leq 2 \mu$ A
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Core)	260 A
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Earth)	10 kA
Total surge current (8/20) $\mu$ s	20 kA
Nominal pulse current $I_{an}$ (10/1000) $\mu$ s (Core-Core)	50 A
Lightning test current (10/350) $\mu$ s, peak value $I_{imp}$	1 kA
Output voltage limitation at 1 kV/ $\mu$ s (Core-Core) spike	$\leq 130$ V
Output voltage limitation at 1 kV/ $\mu$ s (Core-Earth) spike	$\leq 1.1$ kV

Output voltage limitation at 1 kV/ $\mu$ s (Core-Core) static	$\leq 60$ V
Protection level $U_p$ (Core-Core)	$\leq 65$ V (C3 (10 A))
Protection level $U_p$ (Core-Earth)	$\leq 1.1$ kV (C3 (100A))
	$\leq 1.1$ kV (C1 (1 kV/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 (30 MHz / 50 $\Omega$ )
	Typ. 0.1 dB (6 MHz / 150 $\Omega$ )
Cut-off frequency $f_g$ (3 dB), sym. in 50 Ohm system	Typ. 70 MHz
Cut-off frequency $f_g$ (3 dB), sym. in 150 Ohm system	Typ. 40 MHz
Capacity (Core-Core)	Typ. 20 pF
Capacity (Core-Earth)	Typ. 5 pF
Resistance in series	0 $\Omega$
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)
	C2 (10 kV/5 kA)
	C3 (100 A)
	D1 (1 kA)
Alternating current carrying capacity in acc. with IEC 61643-21 (Core-Earth)	10 A - 1 s

**Connection data**

Type of connection	Individual wires
--------------------	------------------

**Connection, protective circuit**

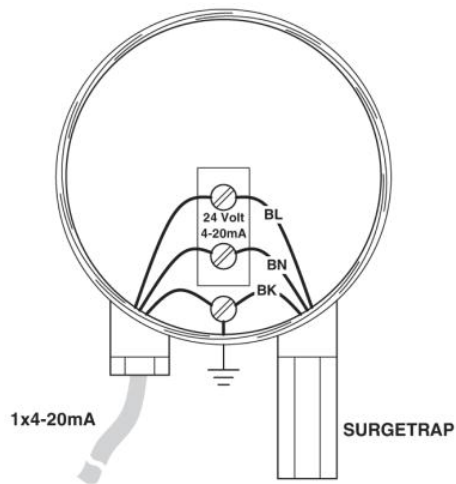
Standards/regulations	EN 61643-21
	EN 60079-0
	EN 60079-1
	EN 60079-11
	EN 60079-26
	EN 61241-0
	EN 61241-1
	EN 61241-11

### Certificates / Approvals

Certification Ex: IECEx, KEMA-EX

### Diagrams/Drawings

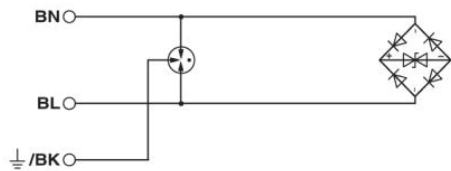
Application drawing



Dimensioned drawing



Circuit diagram



**Address**

PHOENIX CONTACT Deutschland GmbH  
Flachmarktstr. 8  
32825 Blomberg, Germany  
Phone +49 5235 3 12000  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.de>



© 2011 Phoenix Contact  
Technical modifications reserved;