

Surge protection device - S-PT-1X2-24DC-3/4" - 2882598

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Surge protection in the IP67 screw-on module for measuring sensors, direct mounting with 3/4" NPT outer thread, cable gland for the signal cable, two-stage protective circuit. HART-compatible.

Your advantages

- Arresters in hexagonal pipe with various outer threads



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356098182

Technical data

Dimensions

Height	33.5 mm
Width	33.5 mm
Depth	148 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m (amsl (above mean sea level))
Degree of protection	IP67

General

Housing material	Zinc die-cast, surface bronzed and nickel-plated
Color	silver
Standards for clearances and creepage distances	IEC 60664-1
	VDE 0110-1
Mounting type	direct screw connection

Surge protection device - S-PT-1X2-24DC-3/4" - 2882598

Technical data

General

Type	Screw-in module
Number of positions	3
Direction of action	Line-Line & Line-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous voltage U_C	40 V DC
	28 V AC
Rated current	450 mA (55 °C)
Operating effective current I_C at U_C	$\leq 10 \mu\text{A}$
Residual current I_{PE}	$\leq 2 \mu\text{A}$
Nominal discharge current I_n (8/20) μs (line-line)	10 kA
Nominal discharge current I_n (8/20) μs (line-earth)	10 kA (per path)
Nominal discharge current I_n (8/20) μs (shield-earth)	10 kA (optional)
Pulse discharge current I_{imp} (10/350) μs	1 kA
Total discharge current I_{total} (8/20) μs	20 kA
Total discharge current I_{total} (10/350) μs	2 kA
Max. discharge current I_{max} (8/20) μs maximum (line-line)	10 kA
Max. discharge current I_{max} (8/20) μs maximum (line-earth)	10 kA (per path)
Max. discharge current I_{max} (8/20) μs maximum (shield-earth)	10 kA
Nominal pulse current I_{an} (10/1000) μs (line-line)	23 A
Nominal pulse current I_{an} (10/1000) μs (line-earth)	100 A
Nominal pulse current I_{an} (10/1000) μs (shield-earth)	100 A
Output voltage limitation at 1 kV/ μs (line-line) spike	$\leq 55 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-earth) spike	$\leq 450 \text{ V}$ (Direct grounding)
Output voltage limitation at 1 kV/ μs (shield-earth) spike	$\leq 600 \text{ V}$ (optional)
Output voltage limitation at 1 kV/ μs (line-line) static	$\leq 55 \text{ V}$
Output voltage limitation at 1 kV/ μs (line-earth) static	$\leq 450 \text{ V}$ (Direct grounding)
Residual voltage at I_n (line-line)	$\leq 55 \text{ V}$
Residual voltage with I_{an} (10/1000) μs (line-line)	$\leq 65 \text{ V}$
Voltage protection level U_p (line-line)	$\leq 80 \text{ V}$ (C2 - 10 kV / 5 kA)
Voltage protection level U_p (line-earth)	$\leq 450 \text{ V}$ (C2 - 10 kV / 5 kA)
Voltage protection level U_p (shield-earth)	$\leq 600 \text{ V}$ (C2 - 10 kV / 5 kA)
Voltage protection level U_p static (line-line)	$\leq 50 \text{ V}$ (C2 - 10 kV / 5 kA)
Response time t_A (line-line)	$\leq 1 \text{ ns}$
Response time t_A (line-earth)	$\leq 100 \text{ ns}$

Surge protection device - S-PT-1X2-24DC-3/4" - 2882598

Technical data

Protective circuit

Response time tA (shield-earth)	≤ 100 ns
Input attenuation aE, sym.	typ. 0.5 dB (≤ 1.5 MHz / 50 Ω)
	typ. 0.2 dB (≤ 300 kHz / 150 Ω)
Cut-off frequency fg (3 dB), sym. in 50 Ohm system	typ. 6 MHz
Cut-off frequency fg (3 dB), sym. in 150 Ohm system	typ. 2 MHz
Resistance per path	2.2 Ω ±10 %
Surge protection fault message	none
Max. required back-up fuse	500 mA (T)
Impulse durability (line-line)	C2 - 10 kV / 5 kA D1 - 1 kA
Impulse durability (line-earth)	C2 - 10 kV / 5 kA D1 - 1 kA
Impulse durability (shield-earth)	C2 - 10 kV/5 kA D1 - 1 kA

Connection data

Connection method	Screw connection
Connection method IN	Screw terminal blocks
Connection method OUT	Connection line
Connection technology	Screw connection
Screw thread	M3
Tightening torque	0.6 Nm
Stripping length	6 mm
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section AWG	26 ... 16

Standards and Regulations

Standards/specifications	IEC 61643-21 2002
--------------------------	-------------------

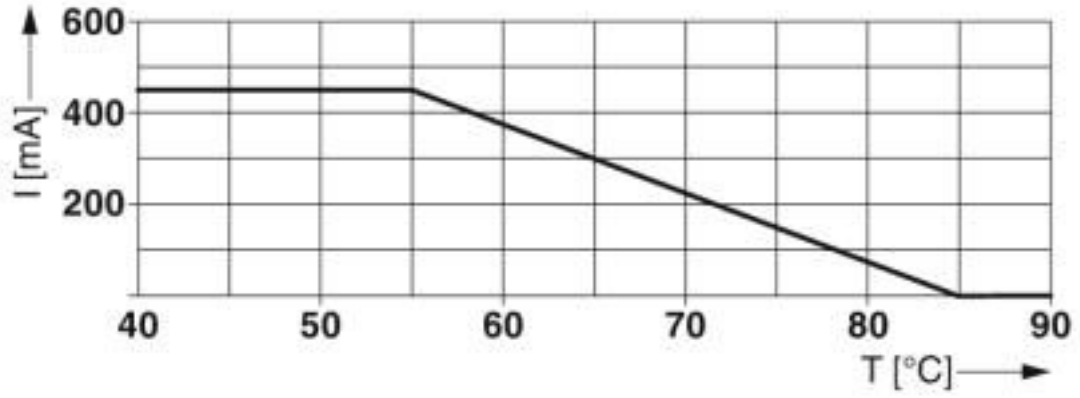
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

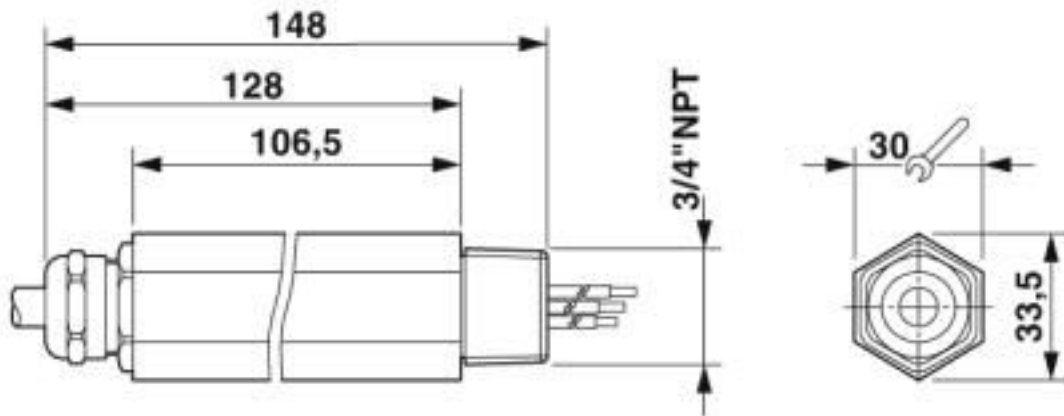
Drawings

Surge protection device - S-PT-1X2-24DC-3/4" - 2882598

Diagram

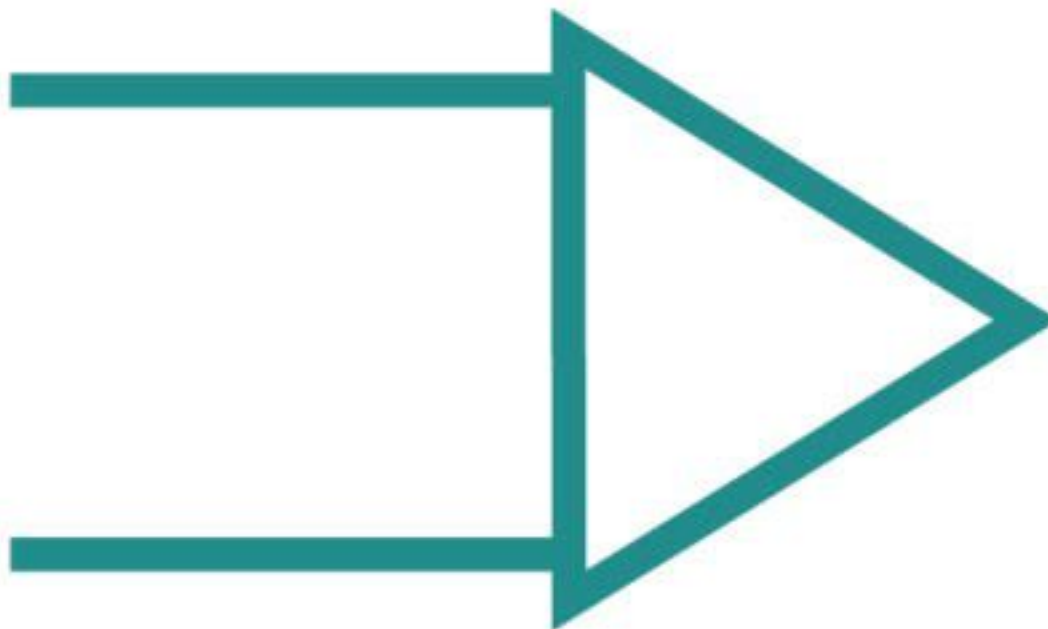


Dimensional drawing

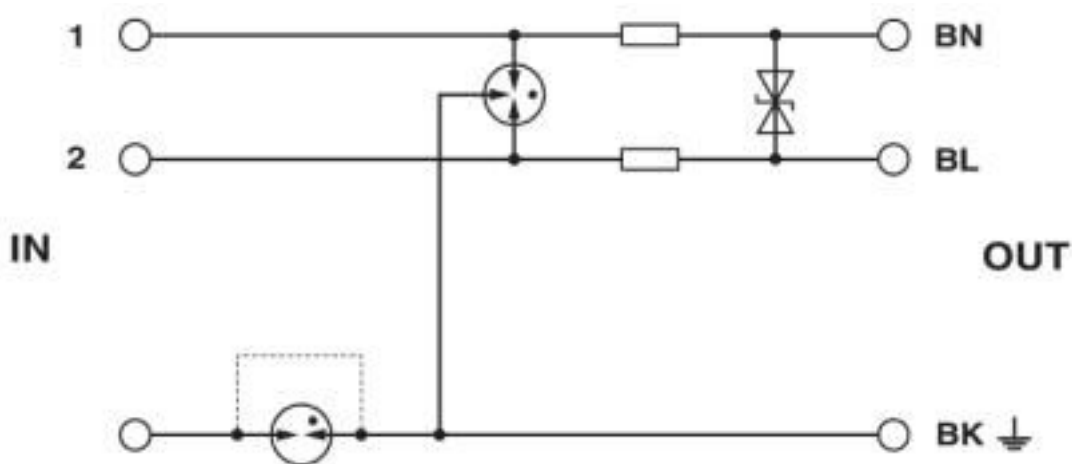


Surge protection device - S-PT-1X2-24DC-3/4" - 2882598

Pictogram



Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27130807
eCl@ss 4.0	27130800
eCl@ss 4.1	27130800
eCl@ss 5.0	27130800
eCl@ss 5.1	27130800
eCl@ss 6.0	27130800
eCl@ss 7.0	27130807

Surge protection device - S-PT-1X2-24DC-3/4" - 2882598

Classifications

eCl@ss

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
ETIM 6.0	EC000943
ETIM 7.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610
UNSPSC 12.01	39121610
UNSPSC 13.2	39121620
UNSPSC 18.0	39121620
UNSPSC 19.0	39121620
UNSPSC 20.0	39121620
UNSPSC 21.0	39121620

Approvals

Approvals

Approvals

EAC / EAC

Ex Approvals

Approval details

EAC		EAC-Zulassung
-----	--	---------------

EAC		RU C- DE.*09.B.00169
-----	--	-------------------------

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Surge Suppressors](#) category:

Click to view products by [Phoenix Contact](#) manufacturer:

Other Similar products are found below :

[GUS1](#) [GUS12](#) [BSPM1A600D600LVR](#) [2800521](#) [29-2053](#) [GUS11](#) [GUS2](#) [GUS3](#) [GUS4](#) [30460](#) [SRA64C060X](#) [PC642C015](#) [1810-15-A3](#)
[2713175](#) [4B06B-EC1-150LF](#) [SRA6LC](#) [BPMA75D100LV](#) [CX06M](#) [CCTV1](#) [GUS13](#) [GUS14](#) [GUS5](#) [GUS6](#) [VAL-MS 320/3+0-FM](#) [VAL-US-](#)
[120/40/1+1-FM](#) [VAL-US-120/65/1+1-FM](#) [VAL-US-480D/30/3+0-FM](#) [VAL-US-120/40/1+0-FM](#) [STCHSP121BT1RU](#) [LP-BFDN-CW](#) [LP-](#)
[STRL-NFF](#) [LP-STRL-DFE](#) [GUS22](#) [0804111](#) [5053609](#) [5053201](#) [SPD2-150-1P0](#) [SPD2-550-1P0](#) [6720005416](#) [6720005417](#) [1-2191595-2](#)
[STC-CAT6-P0E-I](#) [SPD2-350-1P0](#) [FLT-CP-350-ST](#) [TTC-6P-3-HF-F-M-12DC-UT-I](#) [SMTPA200](#) [2800989](#) [2906776](#) [2906810](#) [2906847](#)