

Surge protection device - TTC-3-2X1-24DC-PT - 2907326

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 for two signal wires with common reference potential, e.g., Digital IN/OUT.

Your advantages

- ✓ Extremely space-saving installation with the narrowest overall width of just 3.5 mm
- ✓ Cost-optimized with tailored product features
- ✓ Finding the right product for all possible requirements in MCR applications is easy, thanks to the complete range of products with customized features



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4055626199924

Technical data

Dimensions

Height	106 mm
Width	3.5 mm
Depth	69.5 mm (incl. DIN rail 7.5 mm)

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 %
Altitude	≤ 4000 m (amsl (above mean sea level))
Degree of protection	IP20 (with end cover)

General

Housing material	PBT
------------------	-----

Surge protection device - TTC-3-2X1-24DC-PT - 2907326

Technical data

General

Flammability rating according to UL 94	V-0
Color	traffic grey A RAL 7042
Mounting type	DIN rail: TH 35 - 7.5 mm
Type	DIN rail module, one-piece
Direction of action	Line-Line & Line-Signal Ground/Shield & optional Signal Ground/Shield-Earth Ground

Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage U_N	24 V DC
Maximum continuous voltage U_C	30 V DC
	21 V AC
Rated current	250 mA (70°C)
Operating effective current I_C at U_C	$\leq 1 \mu A$
Residual current I_{PE}	$\leq 2 \mu A$
Nominal discharge current I_n (8/20) μs (line-earth)	5 kA
Pulse discharge current I_{imp} (10/350) μs (line-earth)	0.5 kA
Total discharge current I_{total} (8/20) μs	10 kA
Voltage protection level U_p (line-earth)	$\leq 50 V$ (C1 - 500 V / 250 A)
	$\leq 100 V$ (C2 - 10 kV / 5 kA)
	$\leq 50 V$ (C3 - 30 A)
Response time t_A (line-earth)	$\leq 1 ns$
Input attenuation aE, asym.	typ. 0.3 dB ($\leq 600 kHz$ / 150 Ω)
Cut-off frequency f_g (3 dB), asym. (GND) in 150 Ohm system	typ. 2.4 MHz
Capacity (line-earth)	typ. 1 nF
Resistance per path	2.2 $\Omega \pm 10 \%$
Impulse durability (line-earth)	C1 - 500 V / 250 A
	C2 - 10 kV / 5 kA
	C3 - 30 A
	D1 - 500 A
Pulse reset time (line-earth)	$\leq 30 ms$

Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
Conductor cross section, flexible, with ferrule, with plastic sleeve	0.2 mm ² ... 1 mm ²
Conductor cross section flexible, with ferrule without plastic sleeve	0.2 mm ² ... 1.5 mm ²
Conductor cross section solid	0.2 mm ² ... 1.5 mm ²

Surge protection device - TTC-3-2X1-24DC-PT - 2907326

Technical data

Connection data

Conductor cross section AWG	24 ... 16
-----------------------------	-----------

Standards and Regulations

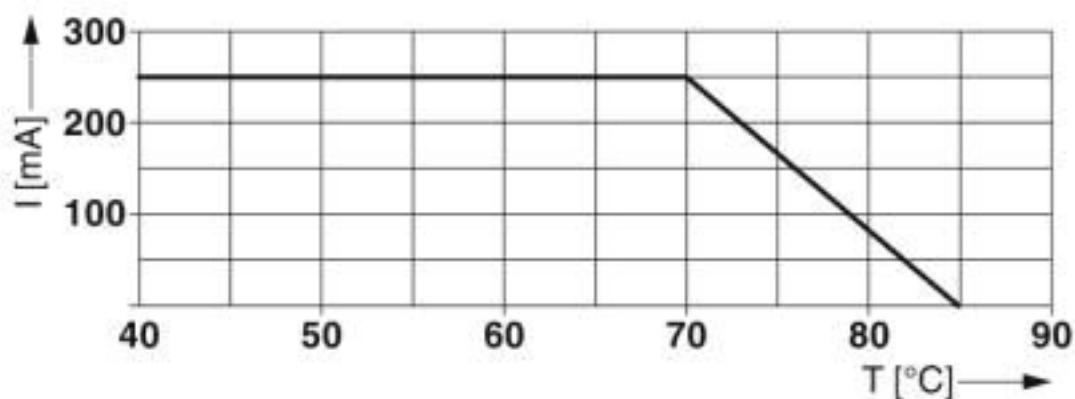
Standards/specifications	IEC 61643-21 2000 + corrigendum 2001 + A1:2008, modified + A2:2012
	EN 61643-21 2001 + A1:2009 + A2:2013

Environmental Product Compliance

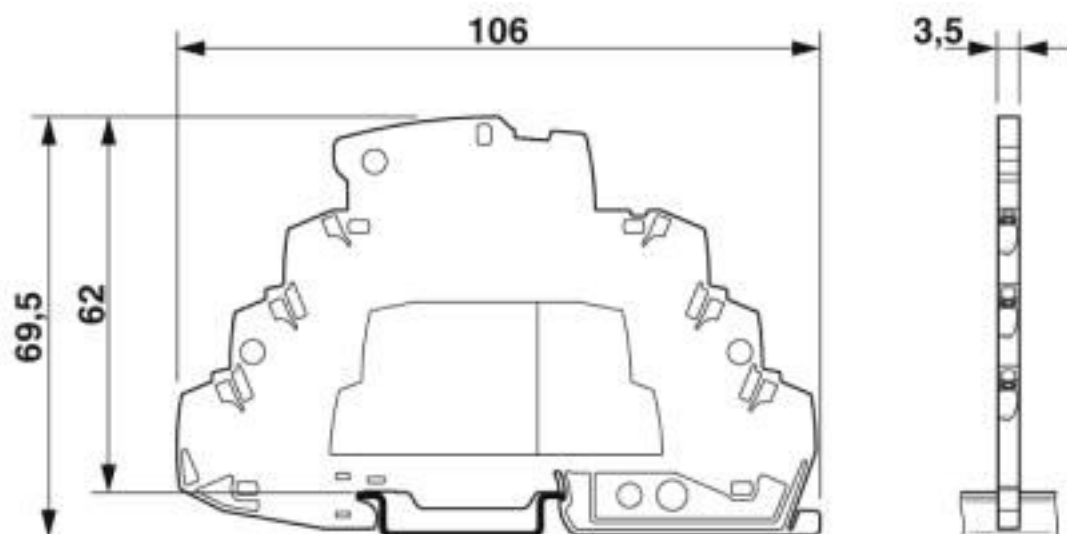
REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Diagram

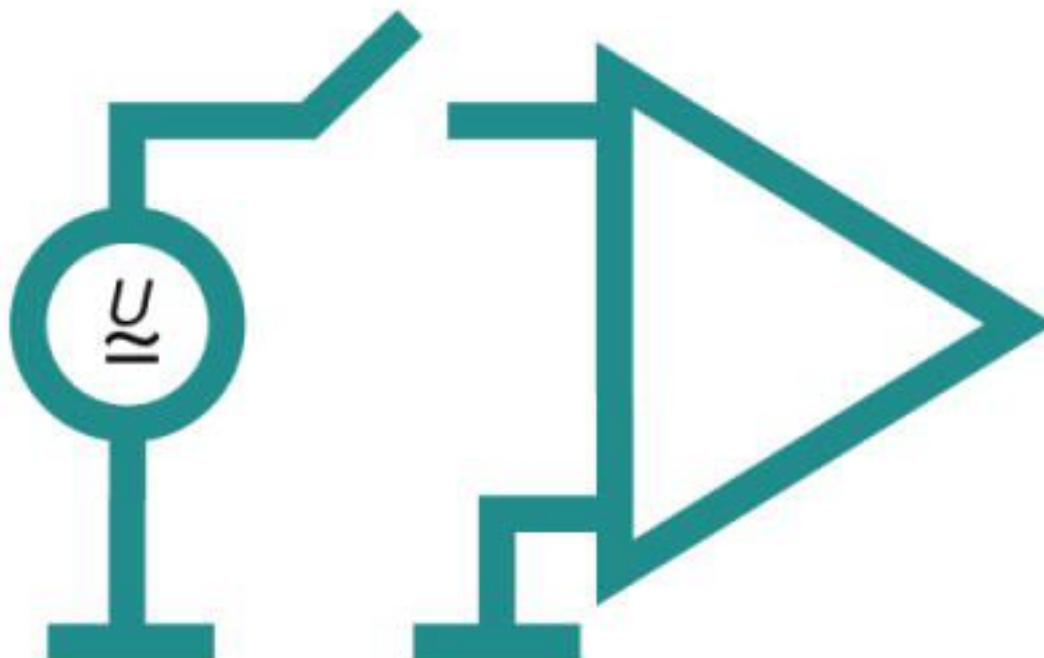


Dimensional drawing

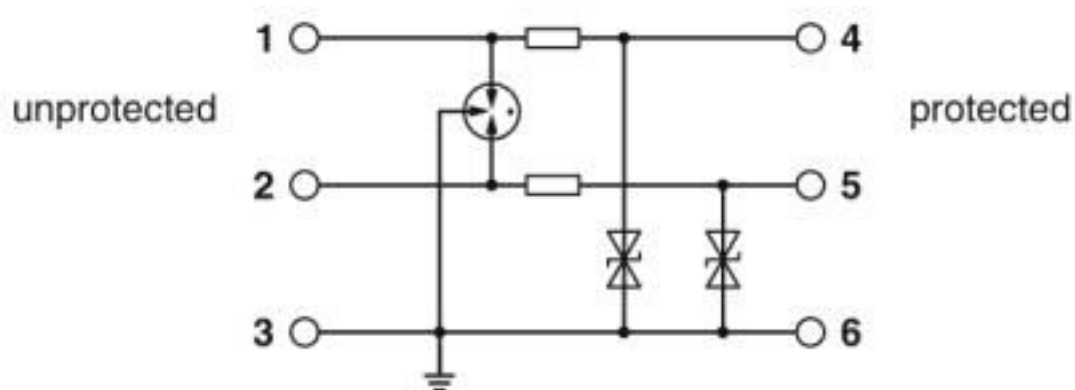


Surge protection device - TTC-3-2X1-24DC-PT - 2907326

Pictogram



Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27130807
eCl@ss 11.0	27130807
eCl@ss 4.0	27140201
eCl@ss 4.1	27130801
eCl@ss 5.0	27130801
eCl@ss 5.1	27130801
eCl@ss 6.0	27130800
eCl@ss 7.0	27130807

Surge protection device - TTC-3-2X1-24DC-PT - 2907326

Classifications

eCl@ss

eCl@ss 8.0	27130807
eCl@ss 9.0	27130807

ETIM

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

DNV GL / CSA / UL Listed / CSAus / cCSAus

Ex Approvals

Approval details

DNV GL		https://approvalfinder.dnvgl.com/	TAE000027G
--------	---	---	------------

CSA		http://www.csagroup.org/services-industries/product-listing/	70136717
-----	---	---	----------

Surge protection device - TTC-3-2X1-24DC-PT - 2907326

Approvals

UL Listed



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

FILE E 138168

CSAus



<http://www.csagroup.org/services-industries/product-listing/>

70136717

cCSAus



Accessories

Accessories

End block

End clamp - CLIPFIX 35-5 - 3022276



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, with parking option for FBS...5, FBS...6, KSS 5, KSS 6, width: 5.15 mm, color: gray

Labeled terminal marker

Zack Marker strip, flat - ZBF 3,5,LGS:FORTL.ZAHLEN - 0801406



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into flat marker groove, for terminal block width: 3.5 mm, lettering field size: 5.15 x 3.5 mm, Number of individual labels: 10

Marker pen

Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

Terminal marking

Surge protection device - TTC-3-2X1-24DC-PT - 2907326

Accessories

Zack Marker strip, flat - ZBF 3,5:UNBEDRUCKT - 0829392



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into flat marker groove, for terminal block width: 3.5 mm, lettering field size: 3.5 x 5.2 mm, Number of individual labels: 10

Additional products

Cover - TTC-3-LCP - 2908843



End cover for terminating a row of TERMITRAB complete TTC-3... terminal blocks

Ferrule - AI-S 1 - 8 TQ - 1200293



Ferrule, S-Slimline, sleeve length: 8 mm, length: 14.5 mm, color: turquoise

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>