

# Surge protection device - TTC-6-GDT-D-24AC-PT-I - 2906862

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Coarse surge protection with integrated status indicator for a 2-wire floating signal circuit.

## Your advantages

- ✔ Space-saving installation due to the narrow overall width of 6.2 mm
- ✔ Signaling without additional auxiliary power, thanks to the mechanical status indicator
- ✔ Optional remote signaling module monitors up to 40 items, without additional wiring
- ✔ Quick and tool-free installation of surge protective devices, thanks to Push-in connection technology
- ✔ Safe behavior in the event of overload, thanks to the integrated disconnect device
- ✔ Coarse surge protection by means of gas discharge tube



## Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 137179
GTIN	4055626137179
Weight per Piece (excluding packing)	20.570 g
Custom tariff number	85363010
Country of origin	Germany

## Technical data

### Dimensions

Height	92 mm
Width	6.2 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

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## Technical data

### Ambient conditions

Permissible humidity (operation)	5 % ... 95 %
Altitude	≤ 4000 m (amsl (above mean sea level))
Degree of protection	IP20 (with end cover)

### General

Housing material	PBT
Flammability rating according to UL 94	V-0
Color	traffic grey A RAL 7042
Mounting type	DIN rail: 35 mm
Type	DIN rail module, one-piece
Direction of action	Line-Earth Ground

### Protective circuit

IEC test classification	C1
	C2
	C3
	D1
Nominal voltage $U_N$	24 V AC
Maximum continuous voltage $U_C$	28 V DC
	30 V AC
Rated current	1 A DC (60 °C)
	2 A AC (60 °C)
Operating effective current $I_C$ at $U_C$	≤ 1 μA
Nominal discharge current $I_n$ (8/20) μs (line-line)	5 kA
Pulse discharge current $I_{imp}$ (10/350) μs (line-line)	0.5 kA
Voltage protection level $U_p$ (line-line)	≤ 800 V (C1 - 2 kV)
	≤ 1 kV (C2 - 10 kV)
	≤ 800 V (C3 - 25 A)
	≤ 900 V (C3 - 100 A)
Response time $t_A$ (line-line)	≤ 100 ns
Input attenuation aE, sym.	typ. 0.3 dB (≤ 8 MHz / 150 Ω)
	typ. 0.3 dB (≤ 30 MHz / 50 Ω)
Cut-off frequency $f_g$ (3 dB), sym. in 50 Ohm system	typ. 130 MHz
Cut-off frequency $f_g$ (3 dB), sym. in 150 Ohm system	typ. 25 MHz
Capacity (line-line)	5 pF
Resistance per path	≤ 100 mΩ
Surge protection fault message	optical
Impulse durability (line-line)	C1 - 1 kA
	C2 - 5 kA
	C3 - 100 A
	D1 - 500 A

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## Technical data

### Protective circuit

Pulse reset time (line-line)	≤ 1 ms
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### Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section solid	0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section AWG	24 ... 12

### Standards and Regulations

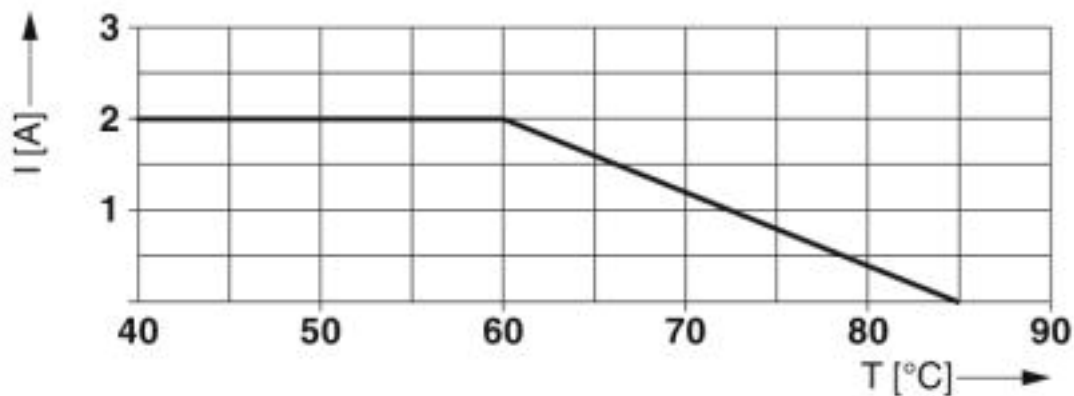
Standards/specifications	IEC 61643-21 2000 + corrigendum 2001 + A1:2008, modified + A2:2012
	EN 61643-21 2001 + A1:2009 + A2:2013

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

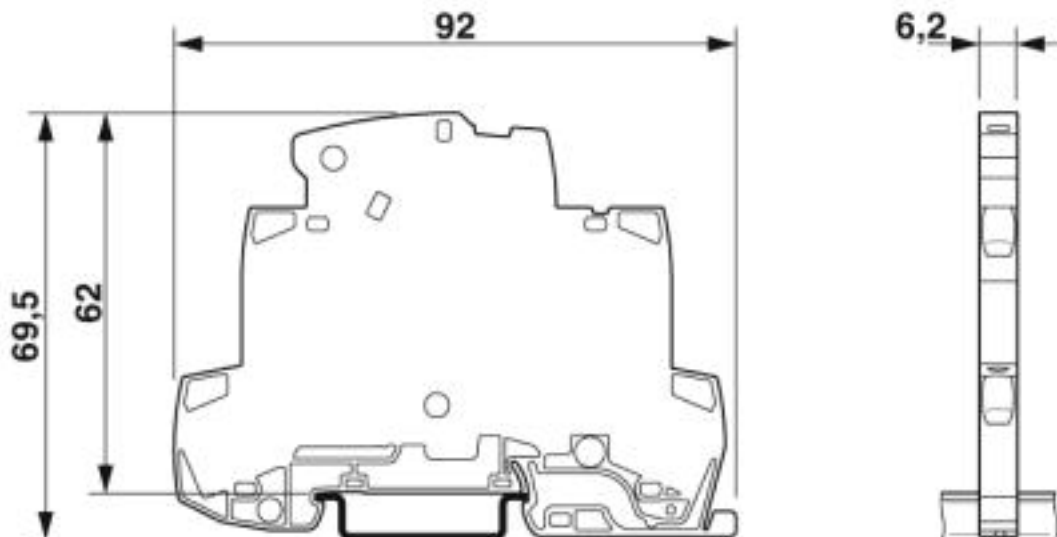
## Drawings

Diagram

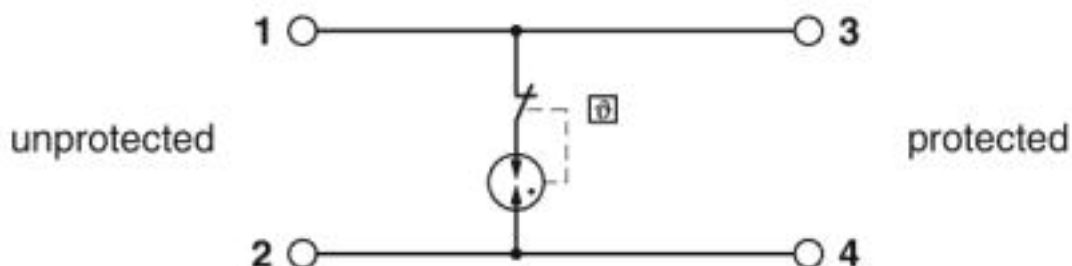


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Dimensional drawing



Circuit diagram



## 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	27130800
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
ETIM 6.0	EC000943

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## Classifications

### ETIM

ETIM 7.0	EC000943
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### 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

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Approvals

DNV GL / CSA / UL Listed / CSAus / cCSAus

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### Ex Approvals

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### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAE000027G
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CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	70136717
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UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 138168
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CSAus		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	70136717
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### Approvals

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 6 CUS - 0825027



Zack Marker strip, flat, Strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 6,QR:FORTL.ZAHLEN - 0808765



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into flat marker groove, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 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

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### Accessories

Zack Marker strip, flat - ZBF 6:UNBEDRUCKT - 0808710



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: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

Zack Marker strip, flat - ZBF 6/WH-100:UNBEDRUCKT - 0808736



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: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 10

### Additional products

Remote signaling set - TTC-6-FMRS-PT - 2907811



Module set for the optical monitoring and floating remote signaling of neighboring surge protective devices of the TERMITRAB complete product range.

Cover - TTC-6-LCP - 2908729



End cover for terminating a row of TERMITRAB complete TTC-6... terminal blocks

Shield connection - SSA 3-6 - 2839295



Shield fast connection for 3 ... 6 mm cable diameter. Potential connecting cable: 200 mm, 1 mm<sup>2</sup>, color: black

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### Accessories

Shield connection - SSA 5-10 - 2839512



Shield fast connection for 5 ... 10 mm cable diameter. Potential connecting cable: 200 mm, 1 mm<sup>2</sup>, color: black

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