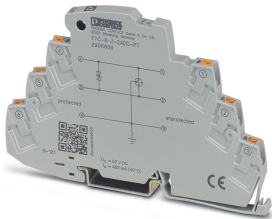


Surge protection device - TTC-6-2-24DC-PT - 2906806

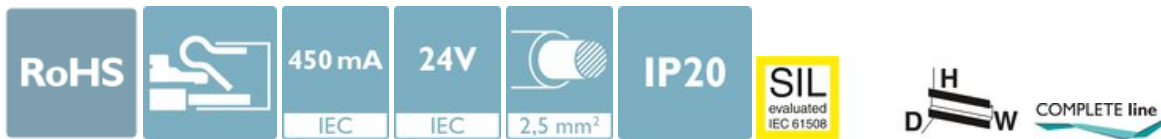
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Surge protection for resistance-dependent measuring signals.




Your advantages

- ✓ Space-saving and cost-saving with a narrow overall width of just 6 mm
- ✓ Quick and tool-free installation of surge protective devices, thanks to Push-in connection technology
- ✓ 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	 4 055626 135700
GTIN	4055626135700
Weight per Piece (excluding packing)	40.000 g
Custom tariff number	85363010
Country of origin	Germany

Technical data

Dimensions

Height	105.8 mm
Width	6.2 mm +0.1 mm
Depth	69.5 mm (incl. DIN rail 7.5 mm)

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
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Surge protection device - TTC-6-2-24DC-PT - 2906806

Technical data

Ambient conditions

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

General

Housing material	PBT
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	450 mA (80 °C)
Operating effective current I_C at U_C	≤ 5 μA
Residual current I_{PE}	≤ 1 μA
Nominal discharge current I_n (8/20) μs (line-line)	0.5 kA
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-line)	≤ 60 V (C1 - 1 kV / 500 A)
	≤ 45 V (C3 - 25 A)
	≤ 50 V (C3 - 100 A)
Voltage protection level U_p (line-earth)	≤ 650 V (C1 - 1 kV / 500 A)
	≤ 1.1 kV (C2 - 10 kV / 5 kA)
	≤ 600 V (C3 - 25 A)
	≤ 700 V (C3 - 100 A)
Voltage protection level U_p static (line-earth)	≤ 1.1 kV (C2 - 10 kV / 5 kA)
Response time t_A (line-line)	≤ 1 ns

Surge protection device - TTC-6-2-24DC-PT - 2906806

Technical data

Protective circuit

Response time t_A (line-earth)	≤ 100 ns
Input attenuation aE, sym.	typ. 0.3 dB (≤ 300 kHz / 150 Ω)
Cut-off frequency f_g (3 dB), sym. in 150 Ω system	typ. 965 kHz
Capacity (line-earth)	typ. 2.2 nF
Resistance per path	≤ 100 m Ω
Surge protection fault message	none
Max. required back-up fuse	500 mA (FF)
Impulse durability (line-line)	C1 - 1 kV / 500 A C3 - 100 A
Impulse durability (line-earth)	C1 - 1 kV / 500 A C2 - 10 kV / 5 kA C3 - 100 A D1 - 500 A
Pulse reset time (line-earth)	≤ 1 s

Additional technical data

Max. total discharge current $I_{total\ max}$ (8/20) μ s	20 kA (1x)
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Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section solid	0.2 mm ² ... 4 mm ²
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
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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"

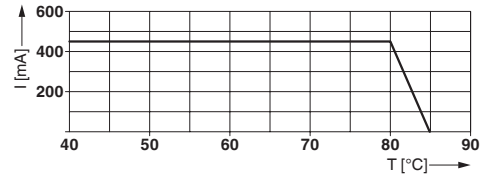
Drawings

Surge protection device - TTC-6-2-24DC-PT - 2906806

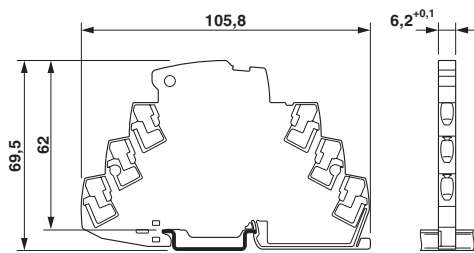
Pictogram



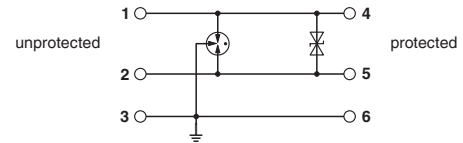
Diagram



Dimensional drawing



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
eCl@ss 9.0	27130807

ETIM

ETIM 2.0	EC000943
ETIM 3.0	EC000943
ETIM 4.0	EC000943
ETIM 6.0	EC000943
ETIM 7.0	EC000943

UNSPSC

UNSPSC 6.01	30212010
UNSPSC 7.0901	39121610
UNSPSC 11	39121610

Surge protection device - TTC-6-2-24DC-PT - 2906806

Classifications

UNSPSC

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
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			

Surge protection device - TTC-6-2-24DC-PT - 2906806

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

Surge protection device - TTC-6-2-24DC-PT - 2906806

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 in, 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 in, for terminal block width: 6.2 mm, lettering field size: 5.15 x 6.15 mm, Number of individual labels: 1000

Additional products

Shield connection - SSA 3-6 - 2839295



Shield fast connection for 3 ... 6 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black

Shield connection - SSA 5-10 - 2839512



Shield fast connection for 5 ... 10 mm cable diameter. Potential connecting cable: 200 mm, 1 mm², color: black