

# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device



1027586

<https://www.phoenixcontact.com/us/products/1027586>

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 documentation. Our general terms of use for downloads are valid.



Type 3 surge protection, consisting of protective plug and base element, with integrated status indicator for 24 V DC power supplies

## Your advantages

- Space-saving and cost-saving with a narrow overall width of just 6 mm
- Continuous monitoring of protective devices, plus mechanical status indicator with optional remote signaling
- Finding the right product for all possible requirements in MCR applications is easy, thanks to the complete range of products with customized features
- Easy testing and documentation with CHECKMASTER 2 with pluggable protective modules
- The signal is not influenced during maintenance work, thanks to the impedance-neutral insertion and removal of protective plugs

## Commercial data

Item number	1027586
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CL01
Product key	CL14D2
GTIN	4055626522333
Weight per piece (including packing)	49 g
Weight per piece (excluding packing)	36.62 g
Customs tariff number	85363030
Country of origin	DE

# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device



1027586

<https://www.phoenixcontact.com/us/products/1027586>

## Technical data

### Notes

#### General

Note	
	CBM:
	2905743 CBM E4 24DC/0.5-10A NO-R
	2905744 CBM E8 24DC/0.5-10A NO-R
	CBMC:
	2906032 CBMC E4 24DC/1-10A NO
	2908716 CBMC E4 24DC/1-10A NO-C
	2910411 CBMC E4 24DC/1-10A IOL
	PTCB:
	2908262 PTCB E1 24DC/1-8A NO
	CB E1:
	2800907 CB E1 24DC/10A NO P
	2800914 CB E1 24DC/10A S-R P
	2800928 CB E1 24DC/10A S-C P
	2905805 CB E1 24DC/10A SI-R P
	2905812 CB E1 24DC/10A SI-C P

### Product properties

Product type	Device protection
Product family	TERMITRAB complete
IEC power supply system	DC
Type	DIN rail module, two-section, divisible
Number of positions	2
Surge protection fault message	optical

### Insulation characteristics

Overvoltage category	III
Pollution degree	2
IEC test classification	III
	T3
EN type	T3
Number of ports	One

### Connection data

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

### Dimensions

# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device



1027586

<https://www.phoenixcontact.com/us/products/1027586>

Dimensional drawing	
Width	6.2 mm +0.1 mm
Height	105.8 mm
Depth	100 mm (incl. DIN rail 7.5 mm)

## Material specifications

Color (Base element)	gray (RAL 7042)
Color (Male connector)	light gray (RAL 7035)
Flammability rating according to UL 94	V-0
CTI value of material	600
Insulating material	PBT
Housing material	PBT

## Protective circuit

### Power supplies

Direction of action	1L-N & N-PE
Nominal voltage $U_N$	24 V DC
Maximum continuous operating voltage $U_C$	30 V DC
Rated load current $I_L$	6 A (30 °C)
Protective conductor current $I_{PE}$	$\leq 5 \mu\text{A}$
Nominal discharge current $I_n$ (8/20) $\mu\text{s}$	1 kA
Combination wave $U_{OC}$	2 kV (2 $\Omega$ ) 2 kV (2 $\Omega$ )
Voltage protection level $U_p$ (DC+) - (DC-)	$\leq 0.09 \text{ kV}$ ( $U_{oc} = 2 \text{ kV}$ ) $\leq 0.2 \text{ kV}$ ( $U_{oc} = 6 \text{ kV}$ )
Voltage protection level $U_p$ (DC+/DC-) - PE	$\leq 0.7 \text{ kV}$
Response time $t_A$ (DC+) - (DC-)	$\leq 1 \text{ ns}$
Response time $t_A$ (DC+/DC-) - PE	$\leq 100 \text{ ns}$
Short-circuit current rating $I_{SCCR}$	60 A DC (without additional backup fuse) 220 A DC
Max. backup fuse with branch wiring	6 A (gG) 10 A (see the note: CBM, CBMC, PTGB, CB E1)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Altitude	$\leq 6000 \text{ m}$ (amsl)

# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device



1027586

<https://www.phoenixcontact.com/us/products/1027586>

Permissible humidity (operation)	5 % ... 95 %
Shock (operation)	30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z)
Vibration (operation)	5g (10 Hz ... 150 Hz / 20 cycles/axis / X, Y, Z)

## Approvals

### Conformity/Approvals

UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D T4A
------------------	--

## Standards and regulations

Standards/specifications	IEC 61643-11
Note	2011

### EN 61643-11

Standards/specifications	EN 61643-11
Note	2012

## Mounting

Mounting type	DIN rail: TH 35 - 7.5 mm
---------------	--------------------------

# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device

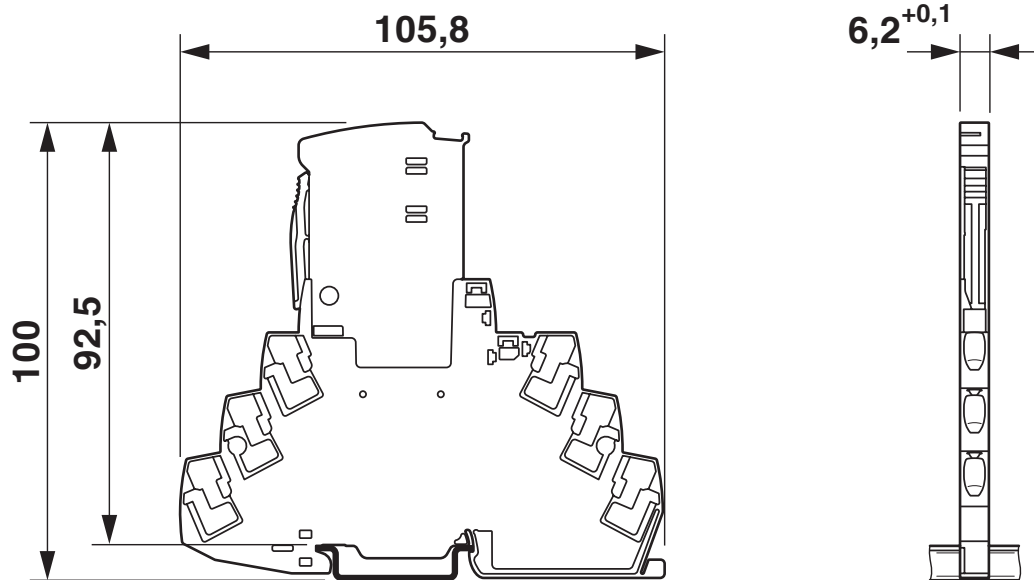


1027586

<https://www.phoenixcontact.com/us/products/1027586>

## Drawings

Dimensional drawing



# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device



1027586

<https://www.phoenixcontact.com/us/products/1027586>

## Product drawing

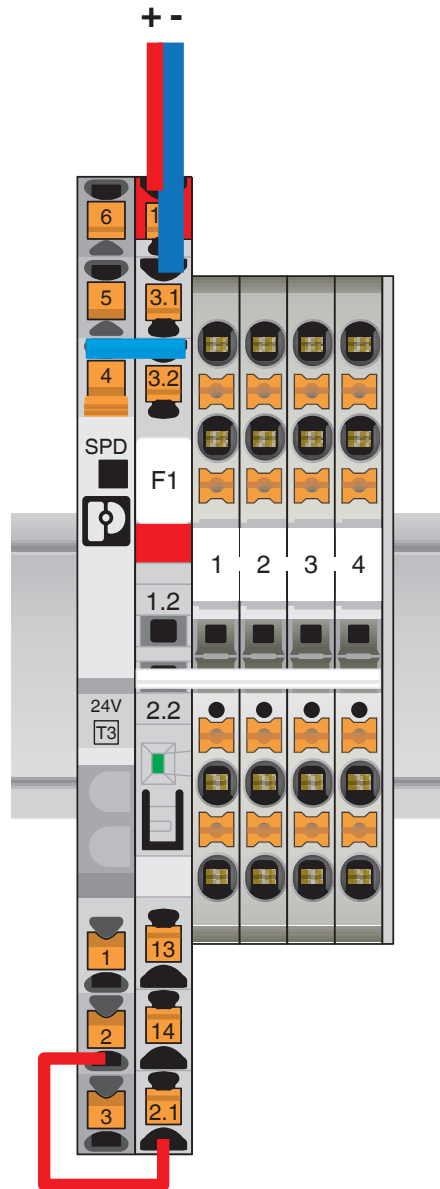


# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device

1027586

<https://www.phoenixcontact.com/us/products/1027586>

Application drawing



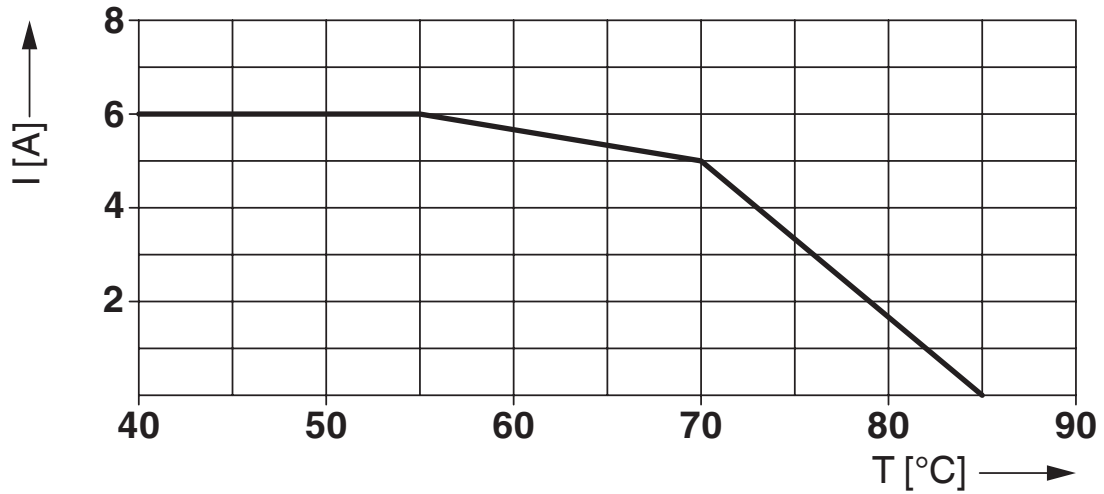
# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device



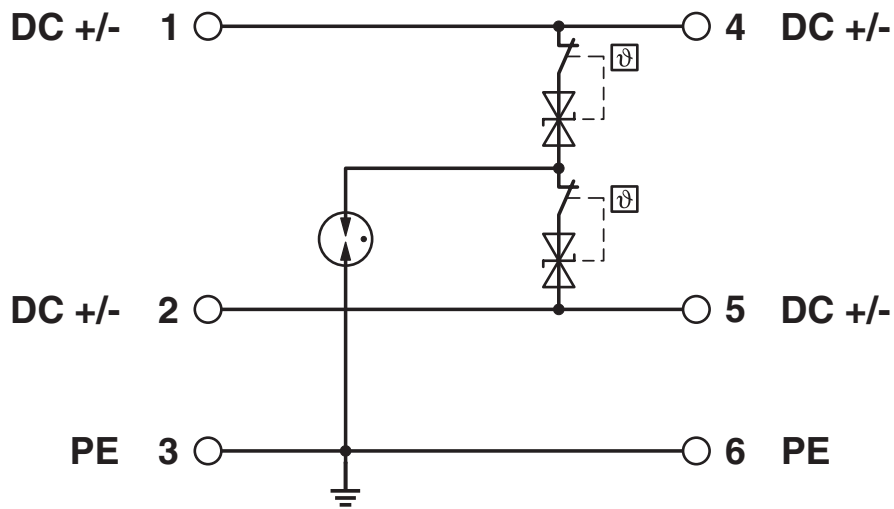
1027586

<https://www.phoenixcontact.com/us/products/1027586>

Diagram



Circuit diagram



# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device



1027586

<https://www.phoenixcontact.com/us/products/1027586>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1027586>



**UL Listed**

Approval ID: FILE E 138168



**DNV GL**

Approval ID: TAE000027G

**UAE-RoHS**

Approval ID: 22-06-16783



**UL Listed**

Approval ID: FILE E 138168



**cUL Listed**

Approval ID: FILE E 333250



**UL Listed**

Approval ID: FILE E 333250



**cULus Listed**

Approval ID: File E 333250

# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device



1027586

<https://www.phoenixcontact.com/us/products/1027586>

## Classifications

### ECLASS

ECLASS-13.0	27171203
ECLASS-15.0	27171203

### ETIM

ETIM 10.0	EC000942
-----------	----------

### UNSPSC

UNSPSC 21.0	39121600
-------------	----------

# TTC-6P-T3-24DC-PT-I - Type 3 surge protection device



1027586

<https://www.phoenixcontact.com/us/products/1027586>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	3e946770-56e5-4cd1-aeaa-c2ea582063dd

### EF3.1 Climate Change

CO2e kg	1.072 kg CO2e
---------	---------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)