

## Type 3 surge protection device - TTC-6P-T3-24DC-PT-I - 1027586

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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



### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 055626 522333 |
| GTIN         | 4055626522333                                                                                           |

### Technical data

#### Dimensions

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

#### Ambient conditions

|                                         |                                         |
|-----------------------------------------|-----------------------------------------|
| Degree of protection                    | IP20                                    |
| Ambient temperature (operation)         | -40 °C ... 80 °C                        |
| Ambient temperature (storage/transport) | -40 °C ... 80 °C                        |
| Altitude                                | ≤ 6000 m (amsl (above mean sea level))  |
| Permissible humidity (operation)        | 5 % ... 95 %                            |
| Shock (operation)                       | 30g (Half-sine / 11 ms / 3x ±X, ±Y, ±Z) |

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## Technical data

### Ambient conditions

|                       |                                           |
|-----------------------|-------------------------------------------|
| Vibration (operation) | 5g (10 ... 150 Hz/20 cycles/axis/X, Y, Z) |
|-----------------------|-------------------------------------------|

### General

|                                        |                                         |
|----------------------------------------|-----------------------------------------|
| EN type                                | T3                                      |
| IEC power supply system                | DC                                      |
| Number of ports                        | One                                     |
| Mode of protection                     | (DC+) - (DC-)                           |
|                                        | (DC+/DC-) - PE                          |
| Mounting type                          | DIN rail: TH 35 - 7.5 mm                |
| Color                                  | traffic grey A RAL 7042                 |
|                                        | light grey RAL 7035                     |
| Housing material                       | PBT                                     |
| Degree of pollution                    | 2                                       |
| Flammability rating according to UL 94 | V-0                                     |
| Type                                   | DIN rail module, two-section, divisible |
| Number of positions                    | 2                                       |
| Surge protection fault message         | optical                                 |

### Additional descriptions

|      |                                  |
|------|----------------------------------|
| 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    |

### Protective circuit

|                                                |                    |
|------------------------------------------------|--------------------|
| Nominal voltage $U_N$                          | 24 V DC            |
| Maximum continuous voltage $U_C$               | 30 V DC            |
| Rated load current $I_L$                       | 6 A (30 °C)        |
| Residual current $I_{PE}$                      | $\leq 5 \mu A$     |
| Nominal discharge current $I_n$ (8/20) $\mu s$ | 1 kA               |
| Combination wave $U_{OC}$                      | 2 kV (2 $\Omega$ ) |

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### Technical data

#### Protective circuit

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
|                                               | 6 kV (12 $\Omega$ )                         |
| Voltage protection level $U_p$ (DC+) - (DC-)  | $\leq 0.09$ kV ( $U_{oc} = 2$ kV)           |
|                                               | $\leq 0.2$ kV ( $U_{oc} = 6$ kV)            |
| Voltage protection level $U_p$ (DC+/DC-) - PE | $\leq 0.7$ kV                               |
|                                               | $\leq 100$ 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, PTCB, CB E1) |
| Maximum backup fuse for through wiring        | 6 A (gG)                                    |

#### 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 solid    | 0.2 mm <sup>2</sup> ... 4 mm <sup>2</sup>   |
| Conductor cross section AWG      | 24 ... 12                                   |
| Stripping length                 | 8 mm                                        |

#### Standards and Regulations

|                          |                   |
|--------------------------|-------------------|
| Standards/specifications | IEC 61643-11 2011 |
|                          | EN 61643-11 2012  |

#### 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" |

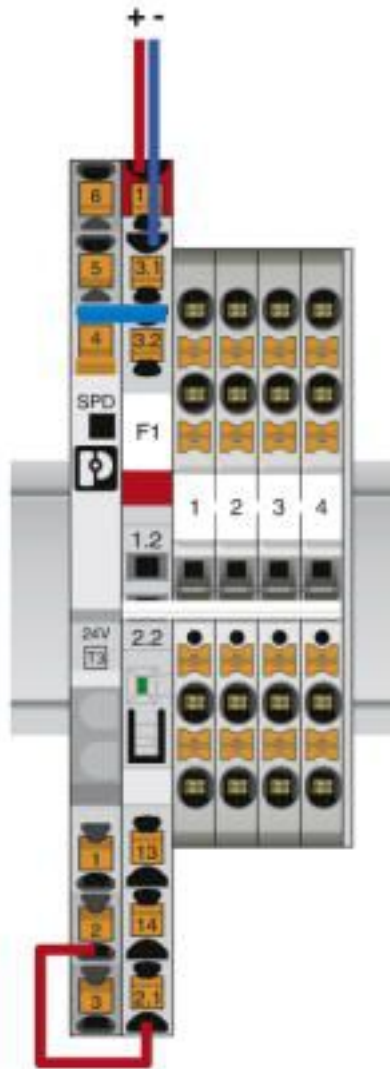
### Drawings

## Type 3 surge protection device - TTC-6P-T3-24DC-PT-I - 1027586

Product drawing

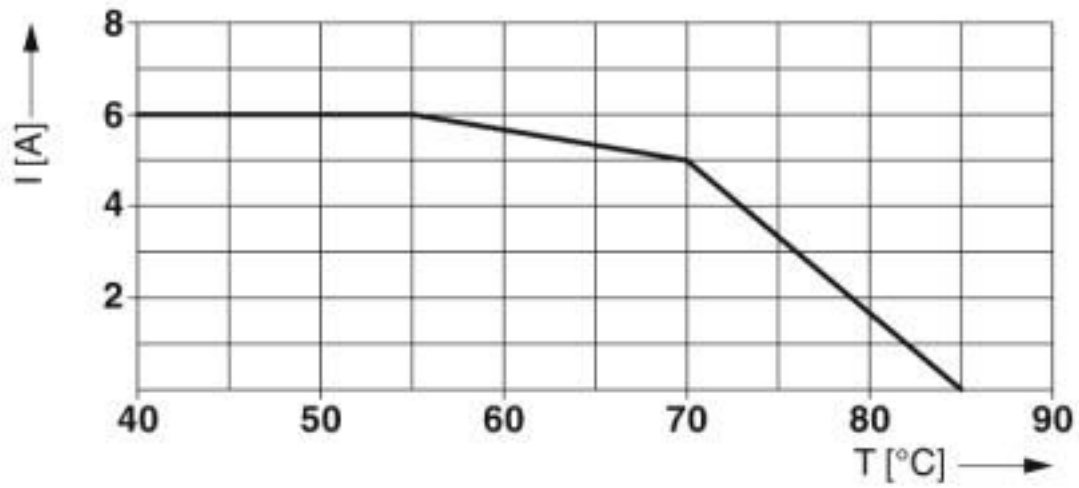


Application drawing

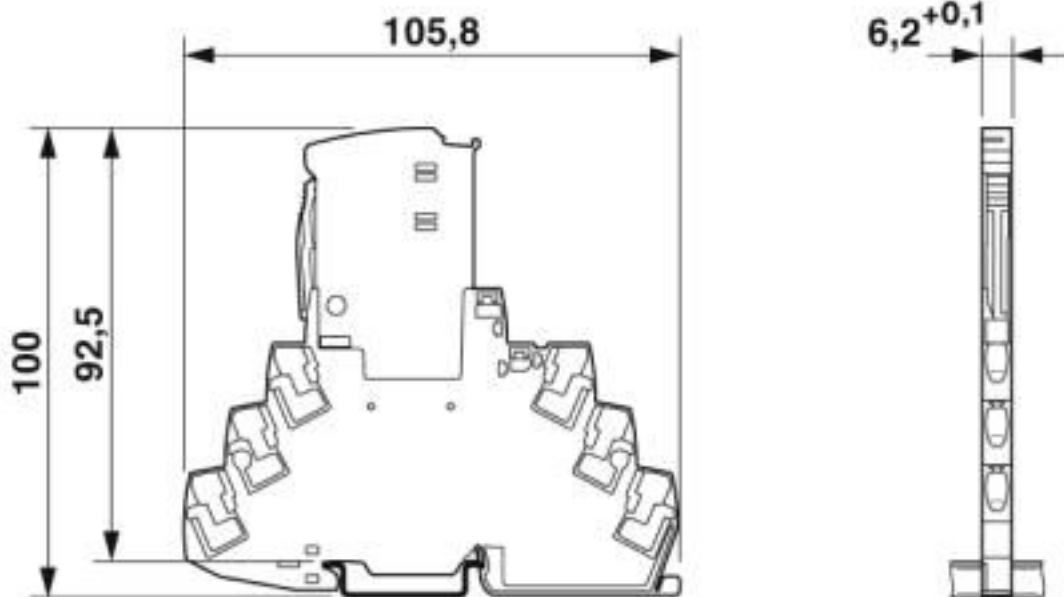


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Diagram

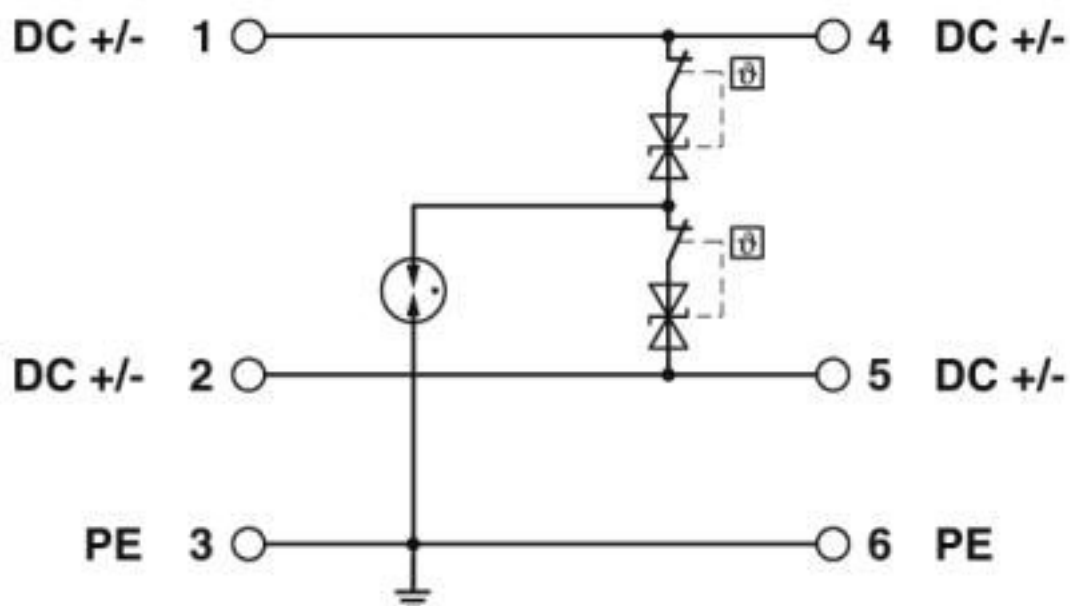


Dimensional drawing



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Circuit diagram



### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27130806 |
| eCl@ss 11.0   | 27130806 |
| eCl@ss 6.0    | 27130800 |
| eCl@ss 7.0    | 27130806 |
| eCl@ss 8.0    | 27130806 |
| eCl@ss 9.0    | 27130806 |

ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC000942 |
| ETIM 6.0 | EC000942 |
| ETIM 7.0 | EC000942 |

### Approvals

Approvals

Approvals

UL Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

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### Approvals

#### Approval details

UL Listed



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

FILE E 138168

### 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

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### Accessories

#### Terminal marking

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-UT - 2907810



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

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

### Spare parts

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### Accessories

Type 3 surge protection plug - TTC-6P-T3-24DC-I-P - 1027591



Replacement plug for type 3 surge protection from the TERMITRAB complete T3 product series. Nominal voltage 24 V.

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