

## Surge protection device - TTC-6-MOV-D-120AC-UT-I - 1109673

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Medium 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
- ✓ Safe behavior in the event of overload, thanks to the integrated disconnect device
- ✓ Medium surge protection by means of varistor



### Key Commercial Data

|                      |                                                                                                         |
|----------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit         | 1                                                                                                       |
| GTIN                 | <br>4 063151 022372 |
| GTIN                 | 4063151022372                                                                                           |
| Custom tariff number | 85363010                                                                                                |

### 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                       |
| Permissible humidity (operation)        | 5 % ... 95 %                           |
| Altitude                                | ≤ 2000 m (amsl (above mean sea level)) |
| Degree of protection                    | IP20 (with end cover)                  |

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## Technical data

### 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                                          |
| Nominal voltage $U_N$                                      | 120 V AC                                    |
| Maximum continuous voltage $U_C$                           | 150 V DC                                    |
|                                                            | 150 V AC                                    |
| Rated current                                              | 10 A (60 °C)                                |
| Operating effective current $I_C$ at $U_C$                 | $\leq 100 \mu A$                            |
| Residual current $I_{PE}$                                  | $\leq 100 \mu A$                            |
| Nominal discharge current $I_n$ (8/20) $\mu s$ (line-line) | 2.5 kA                                      |
| Voltage protection level $U_p$ (line-line)                 | $\leq 200 V$ (C1 - 800 A)                   |
|                                                            | $\leq 500 V$ (C2 - 5 kV)                    |
|                                                            | $\leq 380 V$ (C3 - 25 A)                    |
|                                                            | $\leq 380 V$ (C3 - 35 A)                    |
| Response time $t_A$ (line-line)                            | $\leq 25 ns$                                |
| Input attenuation aE, sym.                                 | typ. 0.3 dB ( $\leq 300 kHz / 150 \Omega$ ) |
| Cut-off frequency $f_g$ (3 dB), sym. in 150 Ohm system     | typ. 1 MHz                                  |
| Capacity (line-line)                                       | 5 nF                                        |
| Resistance per path                                        | $\leq 100 m\Omega$                          |
| Impulse durability (line-line)                             | C1 - 800 A                                  |
|                                                            | C2 - 2,5 kA                                 |
|                                                            | C3 - 35 A                                   |

### Connection data

|                                  |                                             |
|----------------------------------|---------------------------------------------|
| Connection method                | Screw connection                            |
| Screw thread                     | M3                                          |
| Tightening torque                | 0.5 Nm ... 0.6 Nm                           |
| 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 |
|--------------------------|--------------------------------------------------------------------|

## Surge protection device - TTC-6-MOV-D-120AC-UT-I - 1109673

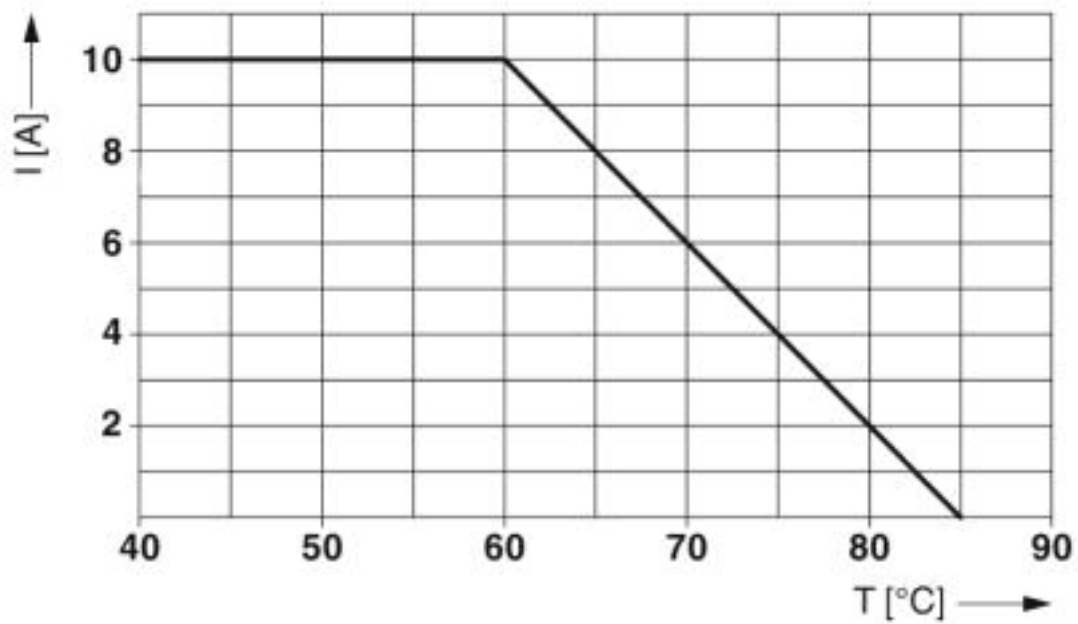
### Technical data

#### Standards and Regulations

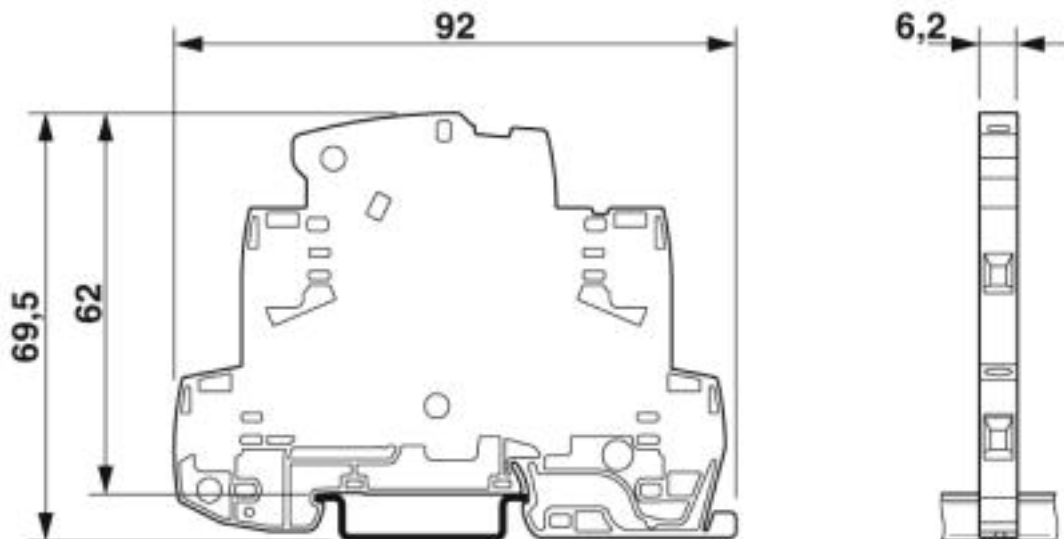
EN 61643-21 2001 + A1:2009 + A2:2013

### Drawings

Diagram

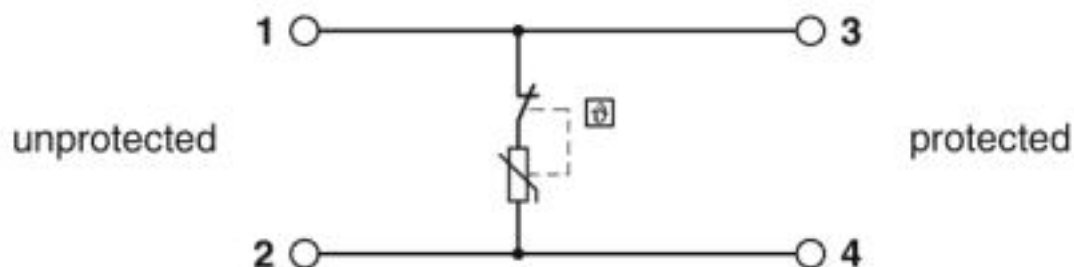


Dimensional drawing



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Circuit diagram



### Classifications

eCl@ss

|            |          |
|------------|----------|
| eCl@ss 8.0 | 27130807 |
| eCl@ss 9.0 | 27130807 |

ETIM

|          |          |
|----------|----------|
| ETIM 5.0 | EC000943 |
|----------|----------|

### Approvals

Approvals

Approvals

DNV GL / CSA / UL Listed / CSAus / cCSAus

Ex Approvals

### Approval details

|           |                                                                                     |                                                                                                                                                       |               |
|-----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DNV GL    |  | <a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>                                                                     | TAE000027G    |
| CSA       |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>               | 70136717      |
| 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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### Approvals

|       |                                                                                   |                                                                                                                                         |          |
|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------|
| CSAus |  | <a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a> | 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 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

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### Accessories

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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### 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

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### 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.

Cover - TTC-6-LCP - 2908729



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

## Surge protection device - TTC-6-MOV-D-120AC-UT-I - 1109673

### Accessories

Fuse holder - TTC-6-FC-UT - 1054762



Fuse carrier for surge protective devices of the TERMITRAB complete product range with screw connection technology. Multi-level connection on TTC-6 housings possible. For conventional 5x20 mm miniature fuses.

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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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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