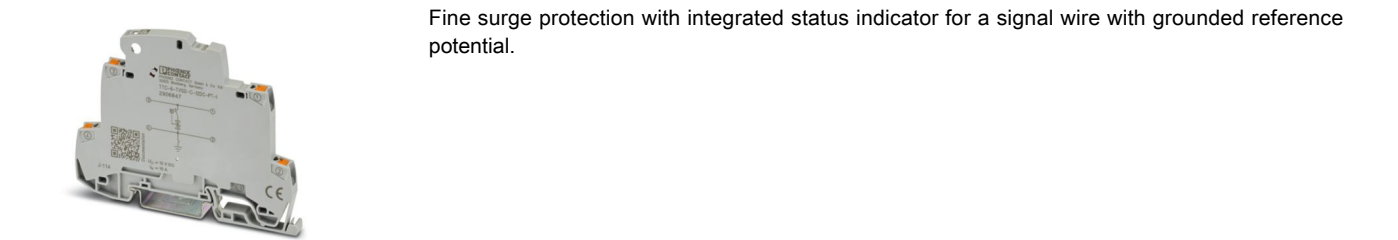


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Your advantages

- 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

Commercial data

|                                      |                     |
|--------------------------------------|---------------------|
| Item number                          | 2906847             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | CL2265              |
| Product key                          | CL2265              |
| Catalog page                         | Page 148 (C-4-2019) |
| GTIN                                 | 4055626137032       |
| Weight per piece (including packing) | 27,5 g              |
| Weight per piece (excluding packing) | 27,5 g              |
| Customs tariff number                | 85363010            |
| Country of origin                    | DE                  |

# TTC-6-TVSD-C-12DC-PT-I - Surge protection device



2906847

<https://www.phoenixcontact.com/be/products/2906847>

## Technical data

### Product properties

|                                |                                     |
|--------------------------------|-------------------------------------|
| Product type                   | Surge protection for MCR technology |
| Product family                 | TERMITRAB complete                  |
| IEC test classification        | C1                                  |
|                                | C3                                  |
| Type                           | DIN rail module, one-piece          |
| Surge protection fault message | optical                             |

### Insulation characteristics

|                      |     |
|----------------------|-----|
| Overvoltage category | III |
| Pollution degree     | 2   |

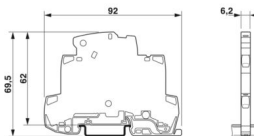
### Electrical properties

|                       |         |
|-----------------------|---------|
| Nominal voltage $U_N$ | 12 V DC |
|-----------------------|---------|

### 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

|                     |                                                                                      |
|---------------------|--------------------------------------------------------------------------------------|
| Dimensional drawing |  |
| Width               | 6.2 mm                                                                               |
| Height              | 92 mm                                                                                |
| Depth               | 69.5 mm (incl. DIN rail 7.5 mm)                                                      |

### Material specifications

|                                        |                 |
|----------------------------------------|-----------------|
| Color                                  | gray (RAL 7042) |
| Flammability rating according to UL 94 | V-0             |
| Insulating material                    | PBT             |
| Housing material                       | PBT             |

### Mechanical properties

#### Mechanical data

|                 |     |
|-----------------|-----|
| Open side panel | Yes |
|-----------------|-----|

### Protective circuit

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|                                                                   |                                               |
|-------------------------------------------------------------------|-----------------------------------------------|
| Direction of action                                               | Line-Earth Ground                             |
| Maximum continuous voltage $U_C$                                  | 15 V DC                                       |
|                                                                   | 10 V AC                                       |
| Rated current                                                     | 10 A (60 °C)                                  |
| Operating effective current $I_C$ at $U_C$                        | $\leq 5 \mu A$                                |
| Residual current $I_{PE}$                                         | $\leq 5 \mu A$                                |
| Nominal discharge current $I_n$ (8/20) $\mu s$ (line-ground)      | 300 A                                         |
| Voltage protection level $U_p$ (line-earth)                       | $\leq 25 V$ (C1 - 0,6 kV / 300 A)             |
|                                                                   | $\leq 22 V$ (C3 - 25 A)                       |
|                                                                   | $\leq 25 V$ (C3 - 60 A)                       |
| Response time $t_A$ (line-earth)                                  | $\leq 1 ns$                                   |
| Input attenuation aE, asym.                                       | typ. 0.3 dB ( $\leq 340 kHz$ / 150 $\Omega$ ) |
| Cut-off frequency $f_g$ (3 dB), asym. (PE) in 150 $\Omega$ system | typ. 1.1 MHz                                  |
| Capacity (Core-Earth)                                             | 2 nF                                          |
| Resistance per path                                               | $\leq 100 m\Omega$                            |
| Surge protection fault message                                    | optical                                       |
| Impulse durability (line-earth)                                   | C1 - 0.6 kV/300 A                             |
|                                                                   | C3 - 60 A                                     |

## Environmental and real-life conditions

### Ambient conditions

|                                         |                       |
|-----------------------------------------|-----------------------|
| Degree of protection                    | IP20 (with end cover) |
| Ambient temperature (operation)         | -40 °C ... 85 °C      |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C      |
| Altitude                                | $\leq 4000 m$ (amsl)  |
| Permissible humidity (operation)        | 5 % ... 95 %          |

## Standards and regulations

|                          |                                                       |
|--------------------------|-------------------------------------------------------|
| Standards/specifications | IEC 61643-21                                          |
| Note                     | 2000 + corrigendum 2001 + A1:2008, modified + A2:2012 |

### EN 61643-21

|                          |                          |
|--------------------------|--------------------------|
| Standards/specifications | EN 61643-21              |
| Note                     | 2001 + A1:2009 + A2:2013 |

## Mounting

|               |                 |
|---------------|-----------------|
| Mounting type | DIN rail: 35 mm |
|---------------|-----------------|

# TTC-6-TVSD-C-12DC-PT-I - Surge protection device

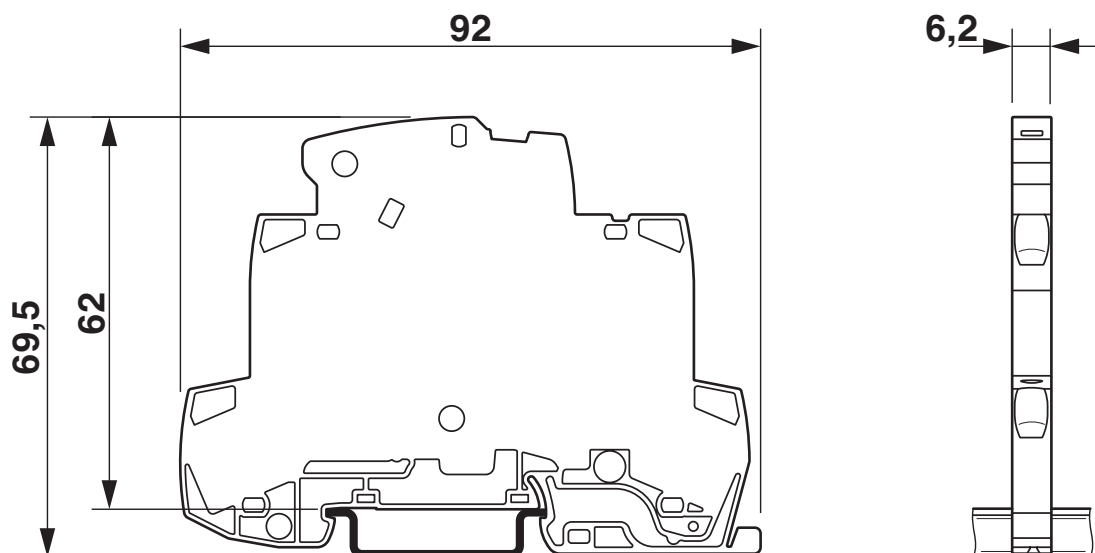
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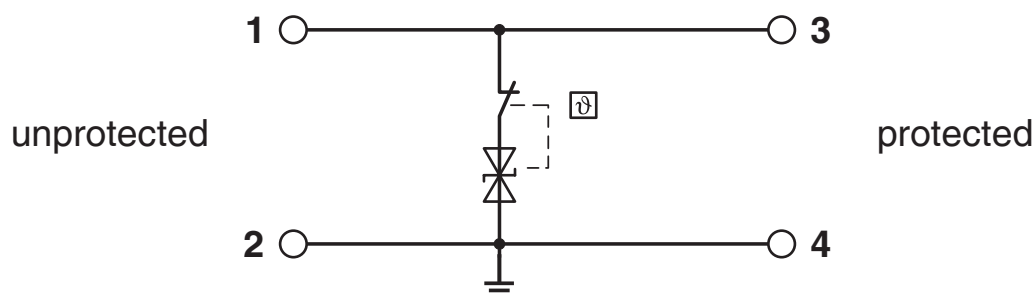


## Drawings

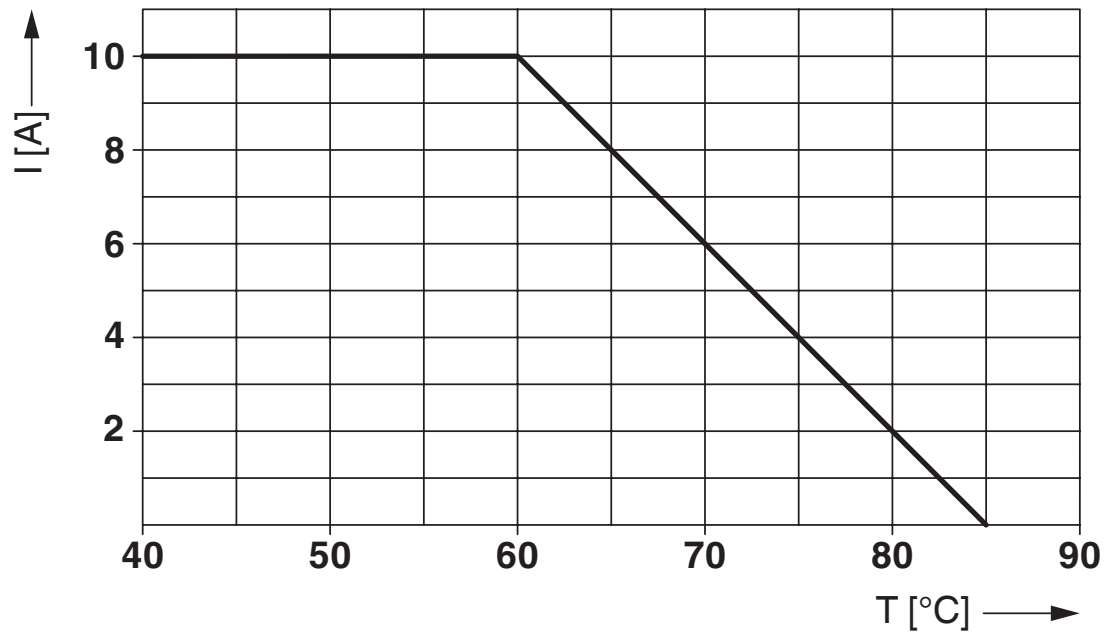
Dimensional drawing



Circuit diagram



Diagram



# TTC-6-TVSD-C-12DC-PT-I - Surge protection device



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<https://www.phoenixcontact.com/be/products/2906847>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/be/products/2906847>



**CSA**

Approval ID: 70136717



**DNV GL**

Approval ID: TAE000027G



**UL Listed**

Approval ID: FILE E 138168



**CSAus**

Approval ID: 70136717

**UAE-RoHS**

Approval ID: 22-06-16783

**Functional Safety**

Approval ID: 16-06-072 R024 V2R0

**cCSAus**

# TTC-6-TVSD-C-12DC-PT-I - Surge protection device



2906847

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-11.0 | 27130807 |
| ECLASS-13.0 | 27171501 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC001625 |
|----------|----------|

### UNSPSC

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

Environmental product compliance

|            |                                                                                                              |
|------------|--------------------------------------------------------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                                                                               |
| China RoHS | Environmentally Friendly Use Period = 50 years                                                               |
|            | For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads" |

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