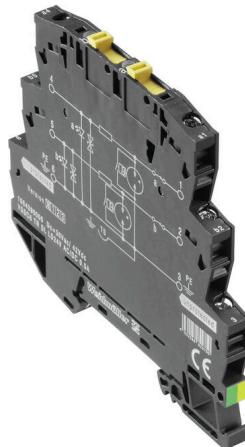


**VSSC6TRSL24VAC/DC0.5A**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergsstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://www.weidmueller.com)



Similar to illustration

Overvoltage coupling along the conductor path may disturb or destroy sensitive signal inputs. It is important to provide protection in the immediate vicinity of I&C devices. Weidmüller's broad product range for the I&C sector offers products in a 2-piece, pluggable design and modular terminals for tension clamp or screw connection. These products are suitable for both binary and analogue signals. Weidmüller also offers other designs with integrated components such as gas discharge tubes or varistors. VARITECTOR stands for flexible and variable surge protection by Weidmüller, tested according to product standard IEC61643-21. The VARITECTOR series can be used in applications according to IEC 61643-22 / VDE 0845-3 for classes C1, C2, C3 and D1. The VARITECTOR SPC, SSC and MCZ OVP product families optimally combine electrical and mechanical properties. Size and easy handling play an important role. This surge protection is suited for confined spaces in industrial and process automation as well as in building automation applications.

#### General ordering data

|            |   |
|------------|---|
| Version    | Surge protection for instrumentation and control,<br>Surge protection for measurement and control |
| Order No.  | <a href="#">1354790000</a>  |
| Type       | VSSC6TRSL24VAC/DC0.5A   |
| GTIN (EAN) | 4050118156744   |
| Qty.       | 10 items  |

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## Technical data

## Approvals

## Approvals



CSAEX



ROHS

Conform

UL File Number Search

[UL Website](#)

Certificate No. (UL)

E311081

## Dimensions and weights

|            |         |
|------------|---------|
| Depth      | 81 mm   |
| Height     | 88.5 mm |
| Width      | 6.2 mm  |
| Net weight | 47 g    |

|                 |             |
|-----------------|-------------|
| Depth (inches)  | 3.189 inch  |
| Height (inches) | 3.4842 inch |
| Width (inches)  | 0.2441 inch |

## Temperatures

|                       |                |                     |                |
|-----------------------|----------------|---------------------|----------------|
| Storage temperature   | -40 °C...80 °C | Ambient temperature | -40 °C...70 °C |
| Operating temperature | -40 °C...70    | Humidity            | 5...96 %       |

## Probability of failure

|                                  |         |
|----------------------------------|---------|
| SIL in compliance with IEC 61508 | 3       |
| SFF                              | 96.67 % |
| PFH in 1*10-9 per hour           | 1.8     |

|      |        |
|------|--------|
| MTTF | 1358 a |
| λges | 54     |

## Environmental Product Compliance

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| RoHS Compliance Status               | Compliant with exemption             |
| RoHS Exemption (if applicable/known) | 7a, 7cl                              |
| REACH SVHC                           | Lead 7439-92-1                       |
| SCIP                                 | 71e97bb7-979f-4330-94c0-20c629bb05e3 |

## Rated data UL

|                      |         |                |  |
|----------------------|---------|----------------|--|
| Certificate No. (UL) | E311081 | UL certificate | <a href="#">UL Zertifikat - PDF/<br/>E311081VOL1SEC3.pdf<br/>(application/pdf)</a> |
|----------------------|---------|----------------|--|

## CSA protection data

|                              |        |
|------------------------------|--------|
| Gas group D                  | IIA    |
| Input-current, max. II       | 500 mA |
| Internal inductance, max. LI | 0 µH   |
| Input voltage, max. Ui       | 42 V   |

|                            |      |
|----------------------------|------|
| Gas groups A, B            | IIC  |
| Gas group C                | IIB  |
| Internal capacity, max. CI | 2 nF |

## General data

|                           |  |
|---------------------------|--|
| Optical function display  | No   |
| Version                   | Surge protection for measurement and control |
| UL 94 flammability rating | V-0  |
| Protection degree         | IP20   |

|               |                                    |
|---------------|------------------------------------|
| Segment       | Measurement - Monitoring - Setting |
| Design        | Terminal                           |
| Colour        | black                              |
| Mounting rail | TS 35                              |

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## Technical data

|                    |  |                    |          |
|--------------------|--|--------------------|----------|
| Isolating function | Yes  | Operating altitude | ≤ 2000 m |
| Testing option     | Functional screw with test plug receptacle, connections 1, 2, 4, 5 |                    |          |

## Insulation coordination acc. to EN 50178

|                        |     |                    |   |
|------------------------|-----|--------------------|---|
| Surge voltage category | III | Pollution severity | 2 |
|------------------------|-----|--------------------|---|

## Rated data IEC / EN

|   |                 |  |                               |
|---|-----------------|--|-------------------------------|
| Number of poles                                       | 1               | Leakage current at Un                              | 2.8 mA                        |
| Signalling contact                                    | No              | Rated voltage (AC)                                 | 24 V                          |
| Rated voltage (DC)                                    | 34 V            | Rated current IN                                   | 500 mA                        |
| Protection level, UP wire - wire                      | 150 V           | Protection level, UP wire - PE                     | 150 V                         |
| Voltage type  | AC/DC           | Fuse protection                                    | 0.5 A                         |
| Volume resistance                                     | 1.8 Ω 10 %      | Frequency range, max.                              | 3.2 MHz                       |
| Standards   | IEC 61643-21    | Lightning test current limp (10/350 µs)            | 1 kA                          |
| Discharge current, max. (8/20 µs)                     | 20 kA           | Requirements category acc. to IEC 61643-21         | C2, C3, D1                    |
| Insertion loss  | 3.12 MHz        | Max. continuous voltage, Uc (AC)                   | 30 V                          |
| Max. continuous voltage, Uc (DC)                      | 42 V            | Surge current-carrying capacity D1                 | 1 kA 10/350 µs                |
| Surge current-carrying capacity C3                    | 10 A 10/1000 µs | Pulse-reset capacity                               | ≤ 20 ms                       |
| Signal transmission properties (-3 dB)                | 3.2 MHz         | Lightning test current, limp (10/350 µs)           | 1 kA                          |
| Overload - failure mode                               | Modus 2         | Wire-PE  |                               |
| Protection level UP for C1 with 500V/250A (wire-wire) | 116 V           | Rated load current IL                              | 500 mA                        |
| Discharge current Imax (8/20µs) wire-PE               | 10 kA           | Discharge current In (8/20µs) wire-PE              | 2.5 kA                        |
| Protection level UP for D1 with 0.5kA (wire-wire)     | 194 V           | Protection level UP for C3 with 1kV/µs (wire-wire) | 106 V                         |
| Protection level UP for C2 with 10kV/5kA (wire-wire)  | 204 V           | Protection level UP for C3 with 1kV/µs (wire-PE)   | 55 V                          |
| Protection level UP for C1 with 500V/250A (wire-PE)   | 60 V            | Surge current-carrying capacity C2                 | 2.5 kA 8/20 µs 5 kV 1.2/50 µs |
|   |                 | Protection level UP for C2 with 10kV/5kA (wire-PE) | 108 V                         |

## Further details of approvals

|                  |  |
|------------------|--|
| GOST certificate | GOST-Zertifikat - PDF/7950_n1-n4.pdf (application/pdf) |
|------------------|--|

## Connection data

|  |                   |  |                     |
|--|-------------------|--|---------------------|
| Type of connection   | Screw connection  | Tightening torque, min.                                    | 0.5 Nm              |
| Tightening torque, max.                                    | 0.8 Nm            | Clamping range, min.                                       | 0.5 mm <sup>2</sup> |
| Clamping range, max.                                       | 4 mm <sup>2</sup> | Wire cross-section, solid, min.                            | 0.5 mm <sup>2</sup> |
| Wire cross-section, solid, max.                            | 6 mm <sup>2</sup> | Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 0.5 mm <sup>2</sup> |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 4 mm <sup>2</sup> | Connection cross-section, stranded, min.                   | 0.5 mm <sup>2</sup> |
| Connection cross-section, stranded, max.                   | 4 mm <sup>2</sup> |  |                     |

## Electrical data

|              |       |
|--------------|-------|
| Voltage type | AC/DC |
|--------------|-------|

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## Technical data

## General data

|                 |       |                   |      |
|-----------------|-------|-------------------|------|
| Number of poles | 1     | Protection degree | IP20 |
| Colour          | black |                   |      |

## Ratings IECEx/ATEX/cUL

|                 |  |
|-----------------|--|
| cUL certificate | cUL Certificate - pdf/<br>VSSC.PDF (application/<br>pdf) |
|-----------------|--|

## Important note

|                     |  |
|---------------------|--|
| Product information | Mode 2: State where the voltage-limiting part of the SPD was short-circuited due to a very low impedance within the SPD. The line is inoperable, but the measuring equipment is still protected by means of a short-circuit. |
|---------------------|--|

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 8.0    | EC000943    | ETIM 9.0    | EC000943    |
| ETIM 10.0   | EC000943    | ECLASS 14.0 | 27-17-15-01 |
| ECLASS 15.0 | 27-17-15-01 |             |             |

## Tender specification sheets

|                    |   |                     |   |
|--------------------|---|---------------------|---|
| Long specification | Surge protection in a one piece, 6.2 mm wide DIN rail module for two binary, potential-free signal circuits with 24 V UC. Each signal path can be opened using an isolator. Signal indication via a green LED. When the terminal is fitted, a simultaneous electrically conducting contact is made between the mounting rail (earth) and the reference potential (ground) of the protection circuit in the terminal. Optical identification of the terminal based on the type of protected switching and the voltage level. The terminal can be labelled or marked. | Short specification | Surge protection in a one piece, 6.2 mm wide DIN rail module for two binary, potential-free signal circuits. Each signal path can be opened using an isolator. Signal indication via a green LED. Version: 24V UC |
|--------------------|---|---------------------|---|

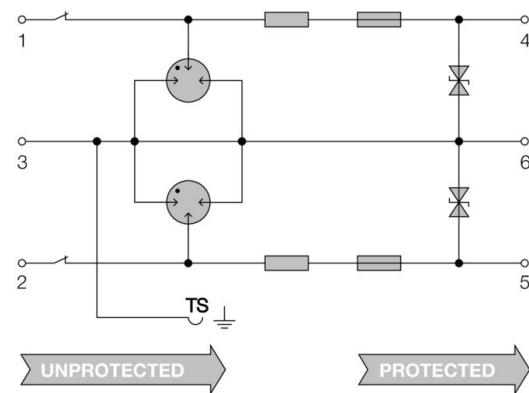
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## Drawings

Similar to illustration



## Circuit diagram

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## Accessories

## Accessories (end plates)



End plates (AP) for the VSSC product series in light blue and black

## General ordering data

|            |                            |                 |
|------------|----------------------------|-----------------|
| Type       | AP VSSC                    | Version         |
| Order No.  | <a href="#">1063110000</a> | VSSC, End plate |
| GTIN (EAN) | 4032248947553              |                 |
| Qty.       | 50 ST                      |                 |

## Testadapter and testsockets



Test adapters and test plugs are used for the electrical connection between terminal blocks and the test equipment. In this way, an electrical contact can be established in the wired state and measurements can be done easily.

## General ordering data

|            |                            |                                       |
|------------|----------------------------|---------------------------------------|
| Type       | PS 2.3 RT                  | Version                               |
| Order No.  | <a href="#">0180400000</a> | Test adapter (terminal), 230 V, 20 mA |
| GTIN (EAN) | 4008190060121              |                                       |
| Qty.       | 20 ST                      |                                       |

## Blank



The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.

Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

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**Accessories****General ordering data**

|            |                            |   |
|------------|----------------------------|---|
| Type       | DEK 5/5 MC NE WS           | Version   |
| Order No.  | <a href="#">1609801044</a> | Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00 |
| GTIN (EAN) | 4008190397111              | Weidmüller, white   |
| Qty.       | 1000 ST                    |   |

**SnapMark**

SnapMark - this tag carrier has been developed specifically for the I-series double-level terminal IDK 1.5N. The flexible pivot mechanism allows cross-connections to be easily installed or removed. It can hold four DEK 5 labelling tags or two WS 10/5 Middle connector markers.

**General ordering data**

|            |                            |  |
|------------|----------------------------|--|
| Type       | SNAPMARK I                 | Version  |
| Order No.  | <a href="#">1805880000</a> | Group markers, Terminal marker, 23 x 5 mm, Pitch in mm (P): 5.00 |
| GTIN (EAN) | 4032248273614              | Weidmüller, white  |
| Qty.       | 50 ST                      |  |