

## VSSC6TRSLLD12VDC0.5A

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 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="#">1064380000</a>  |
| Type       | VSSC6TRSLLD12VDC0.5A  |
| GTIN (EAN) | 4032248829743   |
| Qty.       | 10 items  |

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## Technical data

## Approvals

Approvals



|                       |                            |
|-----------------------|----------------------------|
| ROHS                  | Conform                    |
| UL File Number Search | <a href="#">UL Website</a> |
| Certificate No. (UL)  | E311081                    |

## Dimensions and weights

|            |         |                 |             |
|------------|---------|-----------------|-------------|
| Depth      | 81 mm   | Depth (inches)  | 3.189 inch  |
| Height     | 88.5 mm | Height (inches) | 3.4842 inch |
| Width      | 6.2 mm  | Width (inches)  | 0.2441 inch |
| Net weight | 45.4 g  |                 |             |

## Temperatures

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

## Probability of failure

|                                    |         |      |        |
|------------------------------------|---------|------|--------|
| SIL in compliance with IEC 61508   | 3       | MTTF | 2114 a |
| SFF                                | 96.67 % | λges | 54     |
| PFH in 1*10 <sup>-9</sup> per hour | 1.8     |      |        |

## 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 | UL Zertifikat - PDF/<br>E311081VOL1SEC3.pdf<br>(application/pdf) |
|----------------------|---------|----------------|--|

## CSA protection data

|                              |        |                            |      |
|------------------------------|--------|----------------------------|------|
| Gas group D                  | IIA    | Gas groups A, B            | IIC  |
| Input-current, max. II       | 500 mA | Gas group C                | IIB  |
| Internal inductance, max. LI | 0 µH   | Internal capacity, max. CI | 2 nF |
| Input voltage, max. Ui       | 15 V   |                            |      |

## General data

|                           |   |               |                                       |
|---------------------------|---|---------------|---------------------------------------|
| Optical function display  | Yes   | Segment       | Measurement - Monitoring<br>- Setting |
| Version                   | Surge protection for<br>measurement and control | Design        | Terminal                              |
| UL 94 flammability rating | V-0   | Colour        | black                                 |
| Protection degree         | IP20  | Mounting rail | TS 35                                 |

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### Technical data

|                    |     |                |  |
|--------------------|-----|----------------|--|
| Isolating function | Yes | 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 $U_n$                                   | 3.2 mA                                  |
| Rated voltage (DC)                                 | 12 V                 | Rated current $I_N$  | 500 mA                                  |
| Voltage type                                       | DC                   | Fuse protection  | 0.5 A                                   |
| Volume resistance                                  | 1.8 $\Omega$ 10 %    | Standards  | IEC 61643-21                            |
| Lightning test current $I_{imp}$ (10/350 $\mu$ s)  | 1 kA                 | Discharge current, max. (8/20 $\mu$ s)                     | 20 kA                                   |
| Requirements category acc. to IEC 61643-21         | C2, C3, D1           | Insertion loss   | 732.08 kHz                              |
| Max. continuous voltage, $U_c$ (DC)                | 15 V                 | Surge current-carrying capacity D1                         | 1 kA 10/350 $\mu$ s                     |
| Surge current-carrying capacity C3                 | 10 A 10/1000 $\mu$ s | Pulse-reset capacity                                       | $\leq$ 20 ms                            |
| Signal transmission properties (-3 dB)             | 750 KHz              | Lightning test current, $I_{imp}$ (10/350 $\mu$ s) Wire-PE | 1 kA                                    |
| Overload - failure mode                            | Modus 2              | Rated load current $I_L$                                   | 500 mA                                  |
| Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE | 10 kA                | Surge current-carrying capacity C2                         | 2.5 kA 8/20 $\mu$ s 5 kV 1.2/50 $\mu$ s |

#### Further details of approvals

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

#### Connection data

|  |                     |  |                   |
|--|---------------------|--|-------------------|
| Stripping length   | 10 mm               | 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 | DC |
|--------------|----|

#### General data

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

#### Ratings IECEx/ATEX/cUL

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

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**Technical data****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 |             |             |

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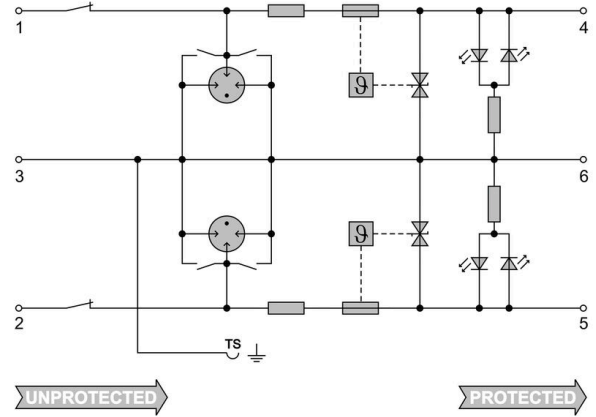
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Drawings

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Circuit diagram

