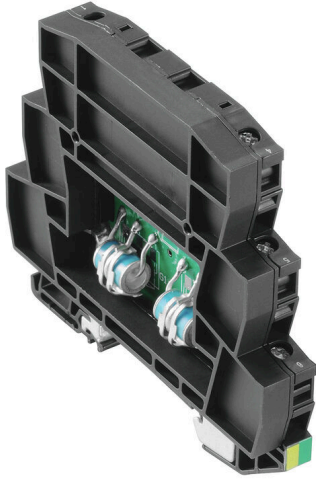


**VSSC6 GDT 110VAC/DC20KA**

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

www.weidmueller.com



Similar to illustration

Surge protection with individual components  
 With gas-discharge tubes in terminal design  
 Gas-discharge tubes / sparkover gaps (GDT) are designed with a terminal shape. They are approved for a maximum DC voltage, which is printed on the component. Any voltage greater than the amount specified is safely discharged within about 10-100µs. Gas arresters can be used for high-power applications.

**General ordering data**

|            |   |
|------------|---|
| Version    | Surge protection for instrumentation and control,<br>Surge protection for measurement and control |
| Order No.  | <a href="#">1064700000</a>  |
| Type       | VSSC6 GDT 110VAC/DC20KA   |
| GTIN (EAN) | 4032248829989   |
| Qty.       | 5 items   |

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## Technical data

### Approvals

Approvals



ROHS Conform

### 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 | 52.8 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 | 11416 a |
| SFF                                | 100 % | λges | 10      |
| PFH in 1*10 <sup>-9</sup> per hour | 0     |      |         |

### Environmental Product Compliance

|                        |                             |
|------------------------|-----------------------------|
| RoHS Compliance Status | Compliant without exemption |
| REACH SVHC             | No SVHC above 0.1 wt%       |

### CSA protection data

|                              |       |                            |      |
|------------------------------|-------|----------------------------|------|
| Gas group D                  | IIA   | Gas groups A, B            | IIC  |
| Input-current, max. II       | 12 A  | Gas group C                | IIB  |
| Internal inductance, max. LI | 0 μH  | Internal capacity, max. CI | 0 nF |
| Input voltage, max. Ui       | 195 V |                            |      |

### General data

|                           |   |               |                                       |
|---------------------------|---|---------------|---------------------------------------|
| Optical function display  | No  | 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                                 |
| Isolating function        | No  |               |                                       |

### Insulation coordination acc. to EN 50178

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

### Rated data IEC / EN

|                    |       |                    |       |
|--------------------|-------|--------------------|-------|
| Number of poles    | 1     | Rated voltage (AC) | 110 V |
| Rated voltage (DC) | 156 V | Rated current IN   | 12 A  |

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### Technical data

|   |                  |   |                  |
|---|------------------|---|------------------|
| Voltage type  | AC/DC            | Volume resistance                                 | <0.1 Ω           |
| Capacitance   | 2.5 nF           | Standards   | IEC 61643-21     |
| Lightning test current limp (10/350 μs)             | 2.5 kA           | Requirements category acc. to IEC 61643-21        | C2, C3, D1       |
| Max. continuous voltage, U <sub>c</sub> (AC)        | 138 V            | Max. continuous voltage, U <sub>c</sub> (DC)      | 195 V            |
| Surge current-carrying capacity D1                  | 2.5 kA 10/350 μs | Surge current-carrying capacity C3                | 100 A 10/1000 μs |
| Lightning test current, limp (10/350 μs) Wire-PE    | 1 kA             | Overload - failure mode                           | Modus 2          |
| Rated load current I <sub>L</sub>                   | 12 A             | Discharge current I <sub>n</sub> (8/20μs) wire-PE | 2.5 kA           |
| Discharge current I <sub>max</sub> (8/20μs) wire-PE | 20 kA            | Surge current-carrying capacity C2                | 5 kA 8/20 μs     |

### 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 | AC/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) |
|-----------------|---|

### 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

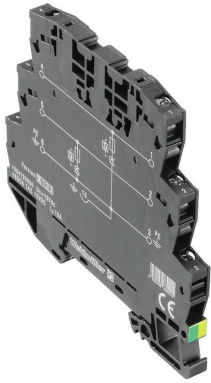
|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 8.0    | EC000943    | ETIM 9.0    | EC000943    |
| ETIM 10.0   | EC000943    | ECLASS 14.0 | 27-17-15-01 |
| ECLASS 15.0 | 27-17-15-01 |             |             |

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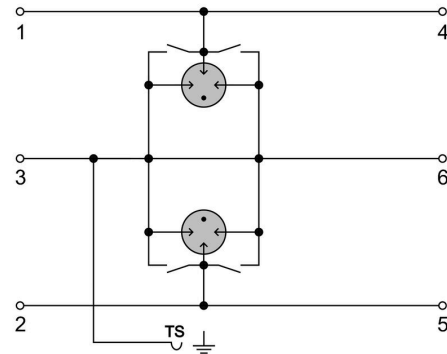
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Drawings



Similar to illustration



Circuit diagram

