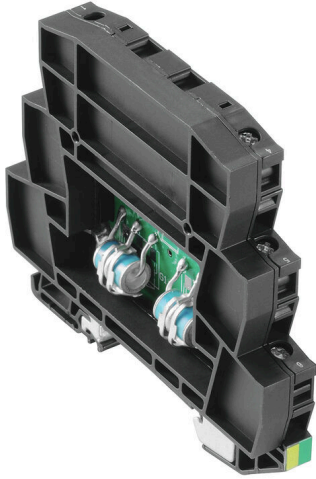


**VSSC6 GDT 110VAC/DC20KA****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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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 - Setting |
| Version                   | Surge protection for 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) 1 kA Wire-PE     |                  | Overload - failure mode                            | Modus 2          |
| Rated load current I <sub>L</sub>                         | 12 A             | Discharge current I <sub>n</sub> (8/20 μs) wire-PE | 2.5 kA           |
| Discharge current I <sub>max</sub> (8/20 μs) wire-PE20 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 |             |             |

## Tender specification sheets

|                    |   |                     |  |
|--------------------|---|---------------------|--|
| Long specification | Feed-through terminal, 12.4mm wide with sparkover gap between | Short specification | Feed-through terminal with sparkover gaps (GDT) between two signal lines |
|--------------------|---|---------------------|--|

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## Technical data

the two signal lines and the mounting rail potential, TS 35 contact base. A signal with max. 12A can be protected here. 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.

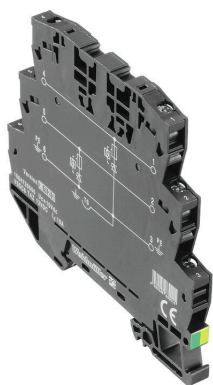
and the mounting rail potential, TS 35 contact base. Version: 110 V UC 20kA

**VSSC6 GDT 110VAC/DC20KA**

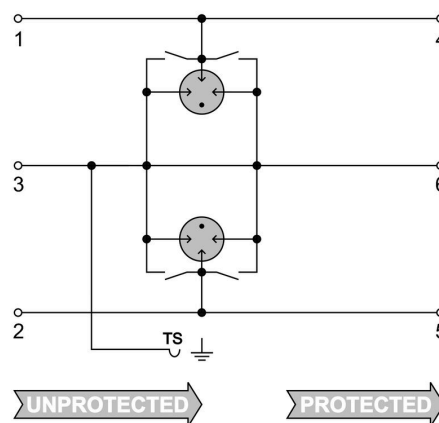
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Drawings



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 VSSC6                   | Version         |
| Order No.  | <a href="#">1063110000</a> | VSSC, End plate |
| GTIN (EAN) | 4032248947553              |                 |
| Qty.       | 50 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.

### 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              | Weidmueller, 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.

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## Accessories

### 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              | Weidmueller, white   |
| Qty.       | 50 ST                      |  |