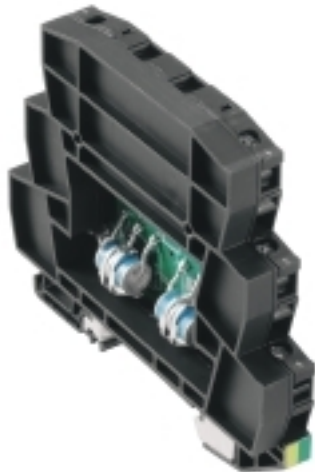


**VSSC6 GDT 240VAC/DC20KA****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

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,<br>$U_P(L/N-PE) \leq 1900\text{ V}$ |
| Order No.  | <a href="#">1064720000</a>   |
| Type       | VSSC6 GDT 240VAC/DC20KA  |
| GTIN (EAN) | 4032248830008  |
| Qty.       | 5 pc(s).   |

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## Technical data

## Dimensions and weights

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Depth      | 81 mm   | Depth (inches)  | 3.189 inch |
| Height     | 88.5 mm | Height (inches) | 3.484 inch |
| Width      | 12.4 mm | Width (inches)  | 0.488 inch |
| Net weight | 58.8 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            | 11,416 a |
| SFF                               | 100 % | $\lambda_{ges}$ | 10       |
| PFH in $1 \cdot 10^{-9}$ per hour | 0     |                 |          |

## CSA protection data

|                                 |           |                               |      |
|---------------------------------|-----------|-------------------------------|------|
| Gas group C                     | IIB       | Gas group D                   | IIA  |
| Gas groups A, B                 | IIC       | Input current, max. $I_I$     | 12 A |
| Input voltage, max. $U_i$       | 407 V     | Internal capacity, max. $C_I$ | 0 nF |
| Internal inductance, max. $L_I$ | 0 $\mu$ H |                               |      |

## General data

|                    |  |                           |          |
|--------------------|--|---------------------------|----------|
| Colour             | black  | Design                    | Terminal |
| Isolating function | No   | Optical function display  | No       |
| Protection degree  | IP20   | Rail                      | TS 35    |
| Segment            | Measurement - Monitoring<br>- Setting        | UL 94 flammability rating | V-0      |
| Version            | Surge protection for measurement and control |                           |          |

## Insulation coordination acc. to EN 50178

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

## Rated data IEC / EN

|   |                       |  |                       |
|---|-----------------------|--|-----------------------|
| Capacitance                                       | 2.4 nF                | Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE | 20 kA                 |
| Discharge current $I_n$ (8/20 $\mu$ s) wire-PE    | 5 kA                  | Discharge current, max. (8/20 $\mu$ s)             | 20 kA                 |
| Lightning test current $I_{imp}$ (10/350 $\mu$ s) | 2.5 kA                | Lightning test current, $I_{imp}$ (10/350 $\mu$ s) |                       |
| Max. continuous voltage, $U_c$ (AC)               | 288 V                 | Wire-PE  | 1 kA                  |
| Number of poles                                   | 1                     | Max. continuous voltage, $U_c$ (DC)                | 407 V                 |
| Protection level $U_p$ (typ.)                     | $\leq 1900$ V         | Overload - failure mode                            | Modus 2               |
| Rated voltage (AC)                                | 240 V                 | Rated current $I_N$                                | 12 A                  |
| Requirements category acc. to IEC 61643-21        | C2, C3, D1            | Rated voltage (DC)                                 | 339 V                 |
| Surge current-carrying capacity C2                | 5 kA 8/20 $\mu$ s     | Standards  | IEC 61643-21          |
| Surge current-carrying capacity D1                | 2.5 kA 10/350 $\mu$ s | Surge current-carrying capacity C3                 | 100 A 10/1000 $\mu$ s |
| Volume resistance                                 | <0.1 $\Omega$         | Voltage type                                       | AC/DC                 |

**VSSC6 GDT 240VAC/DC20kA****Weidmüller Interface GmbH & Co. KG**

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**Technical data****Further details of approvals**

GOST certificate

GOST-Zertifikat

**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> |

**Ratings IECEx/ATEX/cUL**

cUL certificate

cUL Certificate

**Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC000943    | ETIM 7.0    | EC000943    |
| ETIM 8.0    | EC000943    | ETIM 9.0    | EC000943    |
| ECLASS 9.0  | 27-13-08-07 | ECLASS 9.1  | 27-13-08-07 |
| ECLASS 10.0 | 27-13-08-07 | ECLASS 11.0 | 27-13-08-07 |
| ECLASS 12.0 | 27-17-90-90 | ECLASS 13.0 | 27-17-90-90 |

**Tender specification sheets**

Long specification

Feed-through terminal, 12.4mm wide with sparkover gap between 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.

Short specification

Feed-through terminal with sparkover gaps (GDT) between two signal lines and the mounting rail potential, TS 35 contact base. Version: 240 V UC 20kA

**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.

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## Technical data

### Approvals

Approvals



ROHS

Conform

### Downloads

|   |  |
|---|--|
| Approval/Certificate/Document of Conformity | <a href="#">SIL Paper</a><br><a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">CAD data – STEP</a>  |
| User Documentation                          | <a href="#">Beipackzettel / Instruction sheet</a>  |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>   |
| Brochures                                   |  |

**VSSC6 GDT 240VAC/DC20KA**

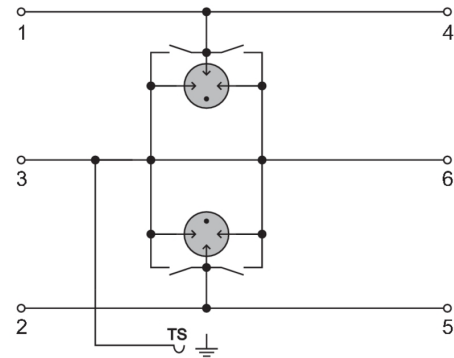
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Drawings



Similar to illustration



UNPROTECTED → PROTECTED

Circuit diagram



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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****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              | Weidmueller, white   |
| Qty.       | 50 pc(s).                  |  |

**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 pc(s).                  |                 |

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****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.       | 1,000 pc(s).               |   |