

VSSC6TRCLFG60VAC/DC0.5A

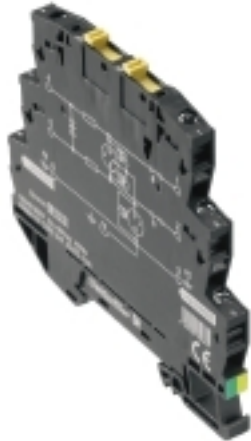
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

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, Surge protection for measurement and control, $U_p(L/N-PE) \leq 1550 \text{ V}$ |
| Order No. | 1064330000 |
| Type | VSSC6TRCLFG60VAC/DC0.5A |
| GTIN (EAN) | 4032248829699 |
| Qty. | 10 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 | 6.2 mm | Width (inches) | 0.244 inch |
| Net weight | 44 g | | |

Temperatures

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

Probability of failure

| | | | |
|------------------------------------|---------|------|---------|
| SIL in compliance with IEC 61508 | 3 | MTTF | 3,936 a |
| SFF | 93.28 % | λges | 29 |
| PFH in 1*10 ⁻⁹ per hour | 1.95 | | |

Rated data UL

| | | | |
|----------------------|---------|----------------|---------------|
| Certificate No. (UL) | E311081 | UL certificate | UL Zertifikat |
|----------------------|---------|----------------|---------------|

CSA protection data

| | | | |
|--|-------|--|--------|
| Gas group C | IIB | Gas group D | IIA |
| Gas groups A, B | IIC | Input current, max. I _I | 500 mA |
| Input voltage, max. U _i | 106 V | Internal capacity, max. C _I | 1 nF |
| Internal inductance, max. L _I | 0 μH | | |

General data

| | | | |
|---------------------------|---------------------------------------|--------------------------|--|
| Colour | black | Design | Terminal |
| Isolating function | Yes | Optical function display | No |
| Protection degree | IP20 | Rail | TS 35 |
| Segment | Measurement - Monitoring - Setting | Testing option | Functional screw with test plug receptacle, connections 1, 2, 4, 5 |
| 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 |
|--------------------|---|------------------------|-----|

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Technical data

Rated data IEC / EN

| | | | |
|--|-------------------------------|--|---|
| Dielectric strength at FG against PE | ≥ 500 V | Discharge current I_{max} (8/20 μ s) wire-PE | 5 kA |
| Discharge current I_{max} (8/20 μ s) wire-wire | 5 kA | Discharge current I_n (8/20 μ s) wire-PE | 2.5 kA |
| Discharge current I_n (8/20 μ s) wire-wire | 2.5 kA | Discharge current, max. (8/20 μ s) | 10 kA |
| Fuse | 0.5 A | Insertion loss | 250 MHz |
| Lightning test current I_{imp} (10/350 μ s) | 0.5 kA | Lightning test current, I_{imp} (10/350 μ s) Wire-PE | 0.5 kA |
| Max. continuous voltage, U_c (AC) | 75 V | Max. continuous voltage, U_c (DC) | 106 V |
| Number of poles | 1 | Overload - failure mode | Modus 2 |
| Protection level U_p (typ.) | ≤ 1550 V | Protection level on output side Wire-wire | 1 kV/ μ s, typically |
| Protection level, U_p GND - PE | 800 V | 1 kV/ μ s, typically | 200 V |
| Pulse-reset capacity | ≤ 20 ms | Protection level, U_p wire - wire | 260 V |
| Rated voltage (AC) | 60 V | Rated current I_N | 500 mA |
| Requirements category acc. to IEC 61643-21 | C2, C3, D1 | Rated voltage (DC) | 85 V |
| Standards | IEC 61643-21, HART-compatible | Signal transmission properties (-3 dB) | 270 Mhz |
| Surge current-carrying capacity C3 | 50 A 10/1000 μ s | Surge current-carrying capacity C2 | 2.5 kA 8/20 μ s 5 kV 1.2/50 μ s |
| Voltage type | AC/DC | Surge current-carrying capacity D1 | 0.5 kA 10/350 μ s |
| | | Volume resistance | 1.8 Ω 10 % |

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 ² | Clamping range, max. | 4 mm ² |
| Wire cross-section, solid, min. | 0.5 mm ² | Wire cross-section, solid, max. | 6 mm ² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 0.5 mm ² | Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 4 mm ² |
| Connection cross-section, stranded, min. | 0.5 mm ² | Connection cross-section, stranded, max. | 4 mm ² |

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 | 27179090 |

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Technical data

Tender specification sheets

| Long specification | Short specification |
|---|--|
| <p>Surge protection in a one piece, 6.2 mm wide DIN rail module for a floating-ground driven signal circuit with 60 V UC, 2-wire technology. Each signal path can be opened using an isolator. A current loop with max. 0.5 A can be protected here. When the terminal is fitted, there is a simultaneous sparkover gap created to the high-impedance earth (earth) and the reference potential (ground) of the protective switch. Optical identification of the terminal based on the type of protected switching and the voltage level. The terminal can be labelled or marked.</p> | <p>Surge protection in a one piece, 6.2 mm wide DIN rail module for a floating-ground driven signal circuit with 2-wire technology and a potential-free earth cable. Each signal path can be opened using an isolator. Version: 60V UC</p> |

Environmental Product Compliance

| | |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1 |
| SCIP | 71e97bb7-979f-4330-94c0-20c629bb05e3 |

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. |
|---------------------|--|

Approvals

Approvals



| | |
|-----------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate No. (UL) | E311081 |

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | SIL Paper EU Konformitätserklärung / EU Declaration of Conformity |
| Engineering Data | CAD data – STEP |
| User Documentation | Beipackzettel / Instruction sheet |
| Catalogues | Catalogues in PDF-format |
| Brochures | |

Creation date December 4, 2023 8:40:01 AM CET

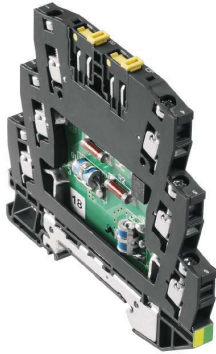
Catalogue status 24.11.2023 / We reserve the right to make technical changes.

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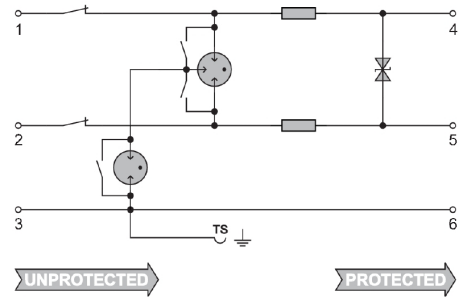
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Drawings



Similar to illustration



Circuit diagram



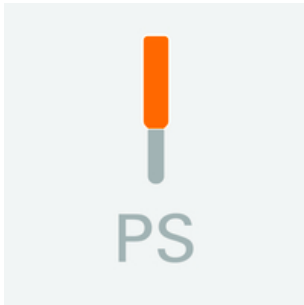
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Accessories

Test plugs



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. | 0180400000 | Accessories, Test plug |
| GTIN (EAN) | 4008190060121 | |
| Qty. | 20 pc(s). | |

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. | 1609801044 | Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00 |
| GTIN (EAN) | 4008190397111 | Weidmueller, white |
| Qty. | 1,000 pc(s). | |

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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. | 1063110000 | VSSC, End plate |
| GTIN (EAN) | 4032248947553 | |
| Qty. | 50 pc(s). | |

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. | 1805880000 | Group markers, Terminal marker, 23 x 5 mm, Pitch in mm (P): 5.00 |
| GTIN (EAN) | 4032248273614 | Weidmueller, white |
| Qty. | 50 pc(s). | |