# VSSC4 CL 12VDC 0.5A

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

www.weidmueller.com

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) < 1000 V |
| Order No. | 1063720000 |
| Type | VSSC4 CL 12VDC 0.5A |
| GTIN (EAN) | 4032248829071 |
| Qty. | 10 pc(s). |

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## Technical data

### Dimensions and weights

| | | | |
|---|---|---|---|
| Depth | 58.5 mm | Depth (inches) | 2.303 inch |
| Height | 76 mm | Height (inches) | 2.992 inch |
| Width | 6.2 mm | Width (inches) | 0.244 inch |
| Net weight | 26.6 g | | |

### Temperatures

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

### Probability of failure

| | | | |
|---|---|---|---|
| SIL PAPER | SIL Paper | SIL in compliance with IEC 61508 | 2 |
| MTTF | 6,008 Jahre | SFF | 89.74 % |
| λges | 19 | PFH in $1*10^{-9}$ per hour | 1.95 |

### Environmental Product Compliance

| | |
|---|---|
| REACH SVHC | Lead 7439-92-1 |

### 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. $U_i$ | 15 V | Internal capacity, max. $C_I$ | 1 nF |
| Internal inductance, max. $L_I$ | 0 µH | | |

### General data

| | | | |
|---|---|---|---|
| Colour | black | Design | Terminal |
| Isolating function | No | Optical function display | No |
| Protection degree | IP20 | Rail | TS 35 |
| Segment | Measurement - Monitoring - 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 |

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## Technical data

### Rated data IEC / EN

| | | | |
|---|---|---|---|
| Discharge current $I_{max}$ (8/20µs) wire-PE | 5 kA | Discharge current $I_{max}$ (8/20µs) wire-wire | 5 kA |
| Discharge current $I_n$ (8/20µs) wire-PE | 2.5 kA | Discharge current $I_n$ (8/20µs) wire-wire | 2.5 kA |
| Discharge current, max. (8/20 µs) | 10 kA | Fuse | 0.5 A |
| Insertion loss | 791.76 kHz | Lightning test current $I_{imp}$ (10/350 µs) | 0.5 kA |
| Lightning test current, $I_{imp}$ (10/350 µs) Wire–PE | 0.5 kA | Max. continuous voltage, Uc (DC) | 15 V |
| Number of poles | 1 | Overload - failure mode | Modus 2 |
| Protection level $U_P$ (typ.) | < 1000 V | Pulse-reset capacity | ≤ 20 ms |
| Rated current $I_N$ | 500 mA | Rated voltage (DC) | 12 V |
| Requirements category acc. to IEC 61643-21 | C2, C3, D1 | Signal transmission properties (-3 dB) | 750 KHz |
| Standards | IEC 61643-21, HART-compatible | Surge current-carrying capacity C2 | 2.5 kA 8/20 µs 5 kV 1.2/50 µs |
| Surge current-carrying capacity C3 | 50 A 10/1000 µs | Surge current-carrying capacity D1 | 0.5 kA 10/350 µs |
| Voltage type | DC | 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 mm² | Clamping range, max. | 4 mm² |
| Wire cross-section, solid, min. | 0.5 mm² | Wire cross-section, solid, max. | 6 mm² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 0.5 mm² | Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 4 mm² |
| Connection cross-section, stranded, min. | 0.5 mm² | Connection cross-section, stranded, max. | 4 mm² |

### Ratings IECEx/ATEX/cUL

| | |
|---|---|
| cUL certificate | cUL Certificate |

### Classifications

| | | | |
|---|---|---|---|
| ETIM 6.0 | EC000943 | ETIM 7.0 | EC000943 |
| ETIM 8.0 | 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 |

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## Technical data

### Tender specification sheets

| | | | |
|---|---|---|---|
| Long specification | Surge protection in a one piece, 6.2 mm wide DIN rail module for a signal circuit with 12 V DC, 2-wire technology. A current loop with max. 0.5 A 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 | Surge protection in a one piece, 6.2 mm wide DIN rail module for a signal circuit with 2-wire technology. Version: 12V DC |

### 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 | E311081 |

### Downloads

| | |
|---|---|
| Approval/Certificate/Document of Conformity | SIL Paper<br>EU_Konformitätserklärung / EU_Declaration_of_Conformity |
| Engineering Data | CAD data – STEP |
| Engineering Data | EPLAN, WSCAD |
| User Documentation | Beipackzettel / Instruction sheet |
| Catalogues | Catalogues in PDF-format |
| Brochures | |

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## Drawings

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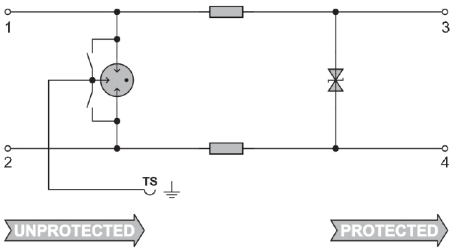


Circuit diagram