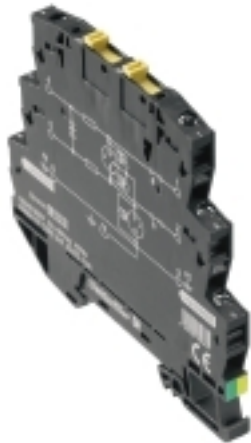


**VSSC6TRCLFG12VDC0.5A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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 IEC 61643-21. 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, 12 V, 500 mA, IEC 61643-21, HART-compatible |
| Order No.  | <a href="#">1064300000</a>                                                                    |
| Type       | VSSC6TRCLFG12VDC0.5A                                                                          |
| GTIN (EAN) | 4032248829668                                                                                 |
| 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 |
| Net weight     | 44 g       | Width           | 6.2 mm     |
| Width (inches) | 0.244 inch |                 |            |

**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   | 3       |
| MTTF      | 3,936 Jahre | SFF                                | 93.28 % |
| λges      | 29          | PFH in 1*10 <sup>-9</sup> 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 <sub>I</sub>     | 500 mA |
| Input voltage, max. U <sub>i</sub>       | 15 V | Internal capacity, max. C <sub>I</sub> | 1 nF   |
| Internal inductance, max. L <sub>I</sub> | 0 μH |                                        |        |

**General data**

|                           |                                       |                          |                                                                          |
|---------------------------|---------------------------------------|--------------------------|--------------------------------------------------------------------------|
| Colour                    | black                                 | Design                   | Terminal                                                                 |
| Isolating function        | Yes                                   | Optical function display | No                                                                       |
| Protection degree         | IP20                                  | Rail                     | TS 35                                                                    |
| Segment                   | Measurement - Monitoring<br>- Setting | Testing option           | Functional screw with<br>test plug receptacle,<br>connections 1, 2, 4, 5 |
| UL 94 flammability rating | V-0                                   | Version                  | Surge protection for<br>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  $\geq 500$  VDischarge current  $I_{\max}$  (8/20 $\mu$ s) wire-wire 5 kADischarge current  $I_n$  (8/20 $\mu$ s) wire-wire 2.5 kA

Fuse 0.5 A

Lightning test current  $I_{\text{imp}}$  (10/350  $\mu$ s)

0.5 kA

Max. continuous voltage,  $U_c$  (DC) 15 V

Overload - failure mode Modus 2

Protection level on output side Wire-wire  
1 kV/ $\mu$ s, typically 30 VProtection level,  $U_p$  wire - wire 35 VRated current  $I_N$  500 mARequirements category acc. to IEC  
61643-21 C2, C3, D1Standards IEC 61643-21, HART-  
compatibleSurge current-carrying capacity C3 50 A 10/1000  $\mu$ s

Voltage type DC

Discharge current  $I_{\max}$  (8/20 $\mu$ s) wire-PE 5 kADischarge current  $I_n$  (8/20 $\mu$ s) wire-PE 2.5 kADischarge current, max. (8/20  $\mu$ s) 10 kA

Insertion loss 250 MHz

Lightning test current,  $I_{\text{imp}}$  (10/350  $\mu$ s)

Wire-PE 0.5 kA

Number of poles 1

Protection level  $U_p$  (typ.)  $\leq 1.7$  kVProtection level,  $U_p$  GND - PE 800 VPulse-reset capacity  $\leq 20$  ms

Rated voltage (DC) 12 V

Signal transmission properties (-3 dB) 270 Mhz

Surge current-carrying capacity C2 2.5 kA 8/20  $\mu$ s 5 kV  
1.2/50  $\mu$ sSurge current-carrying capacity D1 0.5 kA 10/350  $\mu$ sVolume resistance 1.8  $\Omega$  10 %

## Further details of approvals

GOST certificate

GOST-Zertifikat

## Connection data

Type of connection Screw connection

Tightening torque, max. 0.8 Nm

Clamping range, max. 4 mm<sup>2</sup>Wire cross-section, solid, max. 6 mm<sup>2</sup>Conductor cross-section, flexible, AEH  
(DIN 46228-1), max. 4 mm<sup>2</sup>Connection cross-section, stranded,  
max. 4 mm<sup>2</sup>

Tightening torque, min. 0.5 Nm

Clamping range, min. 0.5 mm<sup>2</sup>Wire cross-section, solid, min. 0.5 mm<sup>2</sup>Conductor cross-section, flexible, AEH  
(DIN 46228-1), min. 0.5 mm<sup>2</sup>Connection cross-section, stranded, min. 0.5 mm<sup>2</sup>

## Ratings IECEx/ATEX/cUL

cUL certificate

cUL Certificate

## Classifications

ETIM 6.0

EC000943

ETIM 7.0

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

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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 12 V DC, 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: 12V DC</p> |

### Approvals

Approvals



|                       |         |
|-----------------------|---------|
| ROHS                  | Conform |
| UL File Number Search | E311081 |

### Downloads

|                                             |                                                                                                    |
|---------------------------------------------|----------------------------------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">SIL Paper</a><br><a href="#">CE PAPER</a><br><a href="#">Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">STEP</a>                                                                               |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>                                                                       |
| User Documentation                          | <a href="#">Instruction sheet VSSC</a>                                                             |

## VSSC6TRCLFG12VDC0.5A

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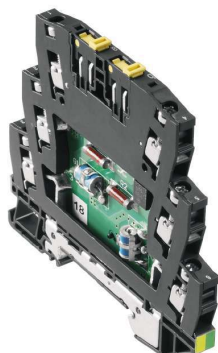
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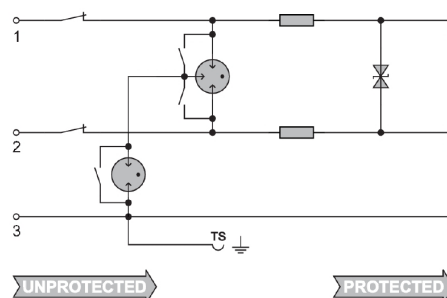
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# Drawings



Similar to illustration



Circuit diagram

