

**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 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, $U_p(L/N-PE) \leq 1.7 \text{ kV}$
Order No.	<a href="#">1064300000</a>
Type	VSSC6TRCLFG12VDC0.5A
GTIN (EAN)	4032248829668
Qty.	10 pc(s).

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**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
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 <sup>-9</sup> 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 <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 - Setting	Testing option	Functional screw with test plug receptacle, connec- tions 1, 2, 4, 5
UL 94 flammability rating	V-0	Version	Surge protection for mea- surement and control

**Insulation coordination acc. to EN 50178**

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

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

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**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)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-com-  
patibleSurge 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**

Stripping length 10 mm

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>

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>**Ratings IECEx/ATEX/cUL**

cUL certificate

cUL Certificate

**Classifications**

ETIM 6.0 EC000943

ETIM 8.0 EC000943

ECLASS 9.0 27-13-08-07

ECLASS 10.0 27-13-08-07

ECLASS 12.0 27-17-90-90

ECLASS 14.0 27-17-90-90

ETIM 7.0 EC000943

ETIM 9.0 EC000943

ECLASS 9.1 27-13-08-07

ECLASS 11.0 27-13-08-07

ECLASS 13.0 27-17-90-90

## VSSC6TRCLFG12VDC0.5A

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Tender specification sheets

## Long specification

Surge protection in a one piece, 6.2 mm wide DIN rail module for a float-ing-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 between the mounting rail (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.

## Short specification

Surge protection in a one piece, 6.2 mm wide DIN rail module for a float-ing-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

## Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	71e97bb7-979f-4330-94c0-20c629bb05e3
RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl

## 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	<a href="#">SIL Paper</a> <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	

## VSSC6TRCLFG12VDC0.5A

**Weidmüller Interface GmbH & Co. KG**

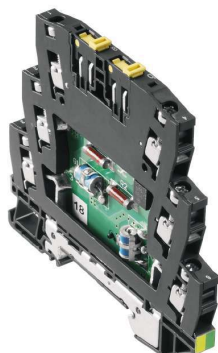
Klingenbergstraße 26

D-32758 Detmold

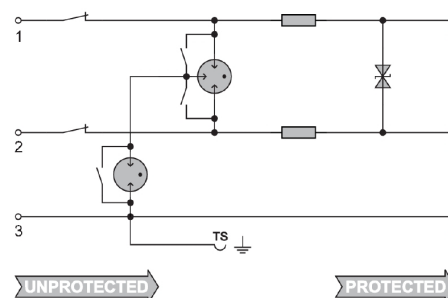
Germany

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

# Drawings



Similar to illustration



Circuit diagram



## VSSC6TRCLFG12VDC0.5A

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

## 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 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.	<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).	

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

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**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.	<a href="#">0180400000</a>	Test adapter (terminal), 230 V, 20 mA
GTIN (EAN)	4008190060121	
Qty.	20 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.	<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).	