

**VSSC6 TR CL 12VDC 0.5A****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 <sub>p</sub> (L/N-PE) 900 V
Order No.	<a href="#">1064220000</a>
Type	VSSC6 TR CL 12VDC 0.5A
GTIN (EAN)	4032248829583
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	43.4 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	2	MTTF	6,008 a
SFF	89.74 %	λges	19
PFH in 1·10 <sup>-9</sup> per hour	1.95		

**Rated data UL**

Certificate No. (UL)	E311081	UL certificate	UL Zertifikat
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**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
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## Technical data

## Rated data IEC / EN

Discharge current  $I_{\max}$  (8/20 $\mu$ s) wire-PE

5 kA

Discharge current  $I_n$  (8/20 $\mu$ s) wire-PE

2.5 kA

Discharge 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.)

900 V

Protection level,  $U_P$  wire - wire

35 V

Rated current  $I_N$ 

500 mA

Requirements category acc. to IEC 61643-21

C2, C3, D1

Standards

IEC 61643-21, HART-compatible

Surge current-carrying capacity C3

50 A 10/1000  $\mu$ s

Voltage type

DC

Discharge current  $I_{\max}$  (8/20 $\mu$ s) wire-

wire

5 kA

Discharge 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 V

Pulse-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 kV1.2/50  $\mu$ s

Surge current-carrying capacity D1

0.5 kA 10/350  $\mu$ s

Volume 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

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

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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 floating-ground signal circuit with 12 V DC, 2-wire technology. A current loop with max. 0.6A can be protected here. Each signal path can be opened using an isolator. 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 floating-ground driven signal circuit with 2-wire technology and a common wire. 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

## 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](#)

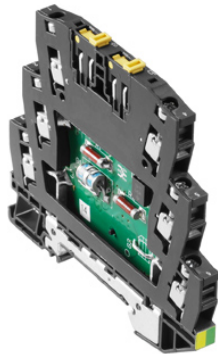
Brochures

## VSSC6 TR CL 12VDC 0.5A

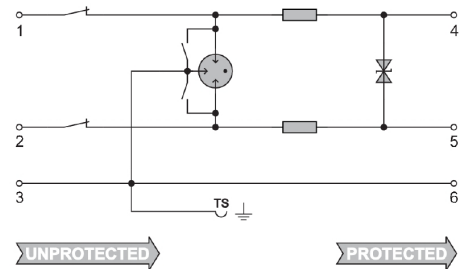
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# Drawings



Similar to illustration



Circuit diagram



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## 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).	

## 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****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).	