

VSSC6 TR CL 12VDC 0.5A

Weidmüller Interface GmbH & Co. KG
Klingenbergsstraße 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
Order No.	1064220000
Type	VSSC6 TR CL 12VDC 0.5A
GTIN (EAN)	4032248829583
Qty.	10 items

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Technical data

Approvals

Approvals



CSAEX



ROHS

Conform

UL File Number Search

[UL Website](#)

Certificate No. (UL)

E311081

Dimensions and weights

Depth

81 mm

Height

88.5 mm

Width

6.2 mm

Net weight

43.4 g

Depth (inches)

3.189 inch

Height (inches)

3.4842 inch

Width (inches)

0.2441 inch

Temperatures

Storage temperature

-40 °C...80 °C

Humidity

5...96 %

Operating temperature

-40 °C...70

Probability of failure

SIL in compliance with IEC 61508

2

SFF

89.74 %

PFH in 1*10-9 per hour

1.95

MTTF

6008 a

λges

19

Environmental Product Compliance

RoHS Compliance Status

Compliant with exemption

RoHS Exemption (if applicable/known)

7a, 7cl

REACH SVHC

Lead 7439-92-1

SCIP

71e97bb7-979f-4330-94c0-20c629bb05e3

Rated data UL

Certificate No. (UL)

E311081

UL certificate

UL Zertifikat - PDF/
E311081VOL1SEC3.pdf
(application/pdf)

CSA protection data

Gas group D

IIA

Gas groups A, B

IIC

Input-current, max. II

500 mA

Gas group C

IIB

Internal inductance, max. LI

0 µH

Internal capacity, max. CI

1 nF

Input voltage, max. Ui

15 V

General data

Optical function display

No

Segment

Measurement - Monitoring
- Setting

Version

Surge protection for
measurement and control

Design

Terminal

UL 94 flammability rating

V-0

Colour

black

Protection degree

IP20

Mounting rail

TS 35

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Technical data

Isolating function	Yes	Testing option	Functional screw with test plug receptacle, connections 1, 2, 4, 5
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Insulation coordination acc. to EN 50178

Surge voltage category	III	Pollution severity	2
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Rated data IEC / EN

Number of poles	1	Rated voltage (DC)	12 V
Rated current IN	500 mA	Protection level on output side Wire-wire 30 V 1 kV/μs, typically	
Voltage type	DC	Fuse protection	0.5 A
Volume resistance	1.8 Ω 10 %	Standards	IEC 61643-2-1, HART-compatible
Lightning test current limp (10/350 μs)	0.5 kA	Discharge current, max. (8/20 μs)	10 kA
Requirements category acc. to IEC 61643-2-1	C2, C3, D1	Insertion loss	250 MHz
Max. continuous voltage, Uc (DC)	15 V	Surge current-carrying capacity D1	0.5 kA 10/350 μs
Surge current-carrying capacity C3	50 A 10/1000 μs	Pulse-reset capacity	≤ 20 ms
Signal transmission properties (-3 dB)	270 Mhz	Lightning test current, limp (10/350 μs)	0.5 kA
Overload - failure mode	Modus 2	Wire-PE	
Discharge current In (8/20μs) wire-wire	2.5 kA	Rated load current IL	500 mA
Discharge current Imax (8/20μs) wire-wire	5 kA	Discharge current Imax (8/20μs) wire-PE5 kA	
		Surge current-carrying capacity C2	2.5 kA 8/20 μs 5 kV 1.2/50 μs

Further details of approvals

GOST certificate	GOST-Zertifikat - PDF/7950_n1-n4.pdf (application/pdf)
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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

Electrical data

Voltage type	DC
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General data

Number of poles	1	Protection degree	IP20
Colour	black		

Ratings IECEx/ATEX/cUL

cUL certificate	cUL Certificate - pdf/ VSSC.PDF (application/pdf)
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Technical data**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.
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Classifications

ETIM 8.0	EC000943	ETIM 9.0	EC000943
ETIM 10.0	EC000943	ECLASS 14.0	27-17-15-01
ECLASS 15.0	27-17-15-01		

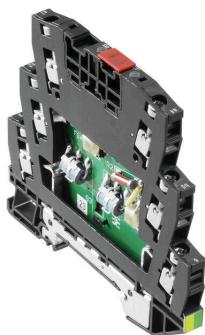
Tender specification sheets

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
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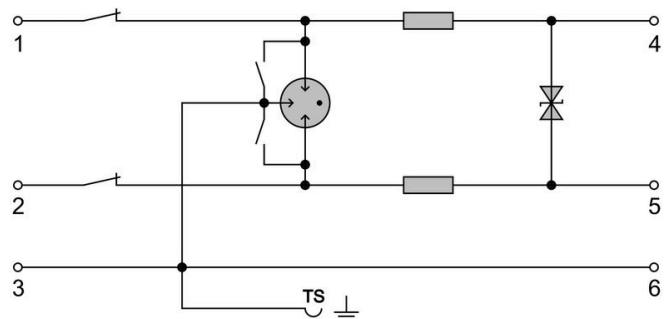
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Drawings

Similar to illustration



UNPROTECTED

PROTECTED

Circuit diagram



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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 ST	

Testadapter and testsockets

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	Test adapter (terminal), 230 V, 20 mA
GTIN (EAN)	4008190060121	
Qty.	20 ST	

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.

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Accessories

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	Weidmüller, white
Qty.	1000 ST	

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	Weidmüller, white
Qty.	50 ST	