

**VSSC6TRSLLD24VAC/DC0.5A**

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

[www.weidmueller.com](http://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
Order No.	<a href="#">1064390000</a>
Type	VSSC6TRSLLD24VAC/DC0.5A
GTIN (EAN)	4032248829750
Qty.	10 items

## VSSC6TRSLLD24VAC/DC0.5A

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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

45.4 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

3

SFF

96.67 %

PFH in 1\*10-9 per hour

1.8

MTTF

2114 a

λges

54

## 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

2 nF

Input voltage, max. Ui

42 V

## General data

Optical function display

Yes

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	Leakage current at Un	2.8 mA
Rated voltage (AC)	24 V	Rated voltage (DC)	34 V
Rated current IN	500 mA	Voltage type	AC/DC
Fuse protection	0.5 A	Volume resistance	1.8 Ω 10 %
Standards	IEC 61643-21	Lightning test current limp (10/350 µs)	1 kA
Discharge current, max. (8/20 µs)	20 kA	Requirements category acc. to IEC 61643-21	C2, C3, D1
Insertion loss	3.12 MHz	Max. continuous voltage, Uc (AC)	30 V
Max. continuous voltage, Uc (DC)	42 V	Surge current-carrying capacity D1	1 kA 10/350 µs
Surge current-carrying capacity C3	10 A 10/1000 µs	Pulse-reset capacity	≤ 20 ms
Signal transmission properties (-3 dB)	3.2 MHz	Lightning test current, limp (10/350 µs)	1 kA
Overload - failure mode	Modus 2	Wire-PE	
Discharge current In (8/20µs) wire-PE	2.5 kA	Rated load current IL	500 mA
Surge current-carrying capacity C2	2.5 kA 8/20 µs 5 kV 1.2/50 µs	Discharge current Imax (8/20µs) wire-PE	10 kA

**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 <sup>2</sup>	Clamping range, max.	4 mm <sup>2</sup>
Wire cross-section, solid, min.	0.5 mm <sup>2</sup>	Wire cross-section, solid, max.	6 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	4 mm <sup>2</sup>
Connection cross-section, stranded, min.	0.5 mm <sup>2</sup>	Connection cross-section, stranded, max.	4 mm <sup>2</sup>

**Electrical data**

Voltage type	AC/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 two binary, potential-free signal circuits with 24 V UC. Each signal path can be opened using an isolator. Signal indication via a green LED. 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 two binary, potential-free signal circuits. Each signal path can be opened using an isolator. Signal indication via a green LED. Version: 24V UC
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**VSSC6TRSLLD24VAC/DC0.5A**

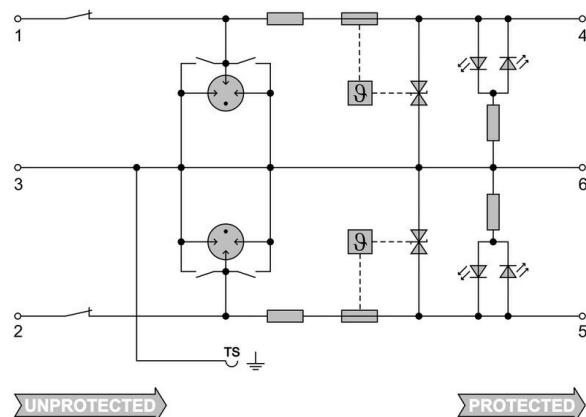
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# Drawings



Similar to illustration



## 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 VSSC	Version
Order No.	<a href="#">1063110000</a>	VSSC, End plate
GTIN (EAN)	4032248947553	
Qty.	50 ST	

### Testadapter and testsockets

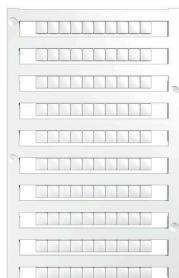


Test adapters and test plugs are used for the electrical connection between terminal blocks and the test equipment. In this way, an electrical contact can be established in the wired state and measurements can be done easily.

### General ordering data

Type	PS 2.3 RT	Version
Order No.	<a href="#">0180400000</a>	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.	<a href="#">1609801044</a>	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.	<a href="#">1805880000</a>	Group markers, Terminal marker, 23 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4032248273614	Weidmüller, white
Qty.	50 ST	