

## VSSC6 CL 24VAC/DC 0.5A

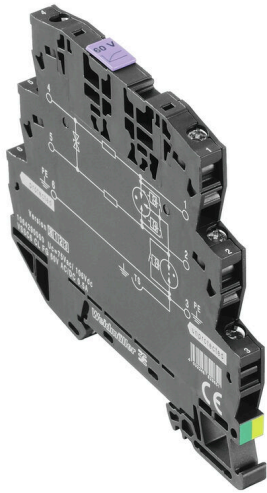
Weidmüller Interface GmbH & Co. KG

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
Order No.	<a href="#">1064170000</a>
Type	VSSC6 CL 24VAC/DC 0.5A
GTIN (EAN)	4032248829552
Qty.	10 items

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## Technical data

### Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (UL) E311081

### Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.4842 inch
Width	6.2 mm	Width (inches)	0.2441 inch
Net weight	40.6 g		

### Temperatures

Storage temperature	-40 °C...80 °C	Ambient temperature	-40 °C...70 °C
Operating temperature	-40 °C...70	Humidity	5...96 %

### Probability of failure

SIL in compliance with IEC 61508	2	MTTF	6008 a
SFF	89.74 %	λges	19
PFH in 1*10 <sup>-9</sup> per hour	1.95		

### 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)
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### 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	42 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
Isolating function	No		

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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	Signalling contact	No
Rated voltage (AC)	24 V	Rated voltage (DC)	34 V
Rated current I <sub>N</sub>	500 mA	Protection level on output side Wire-wire	70 V 1 kV/μs, typically
Protection level, UP wire - wire	900 V	Protection level, UP wire - PE	900 V
Voltage type	AC/DC	Fuse protection	0.5 A
Volume resistance	1.8 Ω 10 %	Frequency range, max.	3.4 MHz
Standards	IEC 61643-21, 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 61643-21	C2, C3, D1
Insertion loss	250 MHz	Max. continuous voltage, U <sub>c</sub> (AC)	30 V
Max. continuous voltage, U <sub>c</sub> (DC)	42 V	Surge current-carrying capacity D1	0.5 kA
Surge current-carrying capacity C3	50 A	Pulse-reset capacity	≤ 170 ms
Signal transmission properties (-3 dB)	3.4 MHz	Lightning test current, limp (10/350 μs) Wire-PE	0.5 kA
Overload - failure mode	Modus 2	Rated load current I <sub>L</sub>	500 mA
Discharge current I <sub>n</sub> (8/20 μs) wire-wire	2.5 kA	Discharge current I <sub>n</sub> (8/20 μs) wire-PE	2.5 kA
Discharge current I <sub>max</sub> (8/20 μs) wire-PE	5 kA	Discharge current I <sub>max</sub> (8/20 μs) wire-wire	5 kA
Surge current-carrying capacity C2	2.5 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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### 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.

### 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

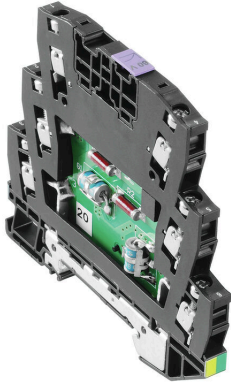
<b>Long specification</b>	Surge protection in a one piece, 6.2 mm wide DIN rail module for a floating-ground signal circuit with 24 V UC, 2-wire technology. A current loop with max. 0.6A can be protected here. When the terminal is fitted, a simultaneous electrically conducting contact is made between 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.	<b>Short specification</b>	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. Version: 24V UC
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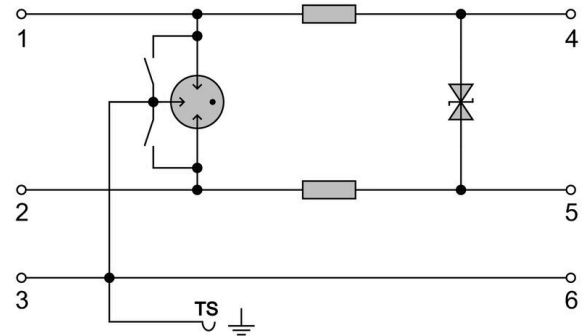
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Drawings



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UNPROTECTED

PROTECTED

Circuit diagram

