

## VSSC6 CL 48VAC/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="#">1064190000</a>
Type	VSSC6 CL 48VAC/DC 0.5A
GTIN (EAN)	4032248829569
Qty.	10 items

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**Technical data**

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
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	85 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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## Technical data

### 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)	48 V	Rated voltage (DC)	68 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	770 V	Protection level, UP wire - PE	770 V
Voltage type	AC/DC	Fuse protection	0.5 A
Volume resistance	1.8 Ω 10 %	Frequency range, max.	5 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)	60 V
Max. continuous voltage, U <sub>c</sub> (DC)	85 V	Surge current-carrying capacity D1	0.5 kA
Surge current-carrying capacity C3	50 A	Pulse-reset capacity	≤ 150 ms
Signal transmission properties (-3 dB)	5 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> (8/20μs) wire-wire	2.5 kA	Discharge current I <sub>n</sub> (8/20μs) wire-PE	2.5 kA
Discharge current I <sub>max</sub> (8/20μs) wire-PE	5 kA	Discharge current I <sub>max</sub> (8/20μs) 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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**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.

**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		

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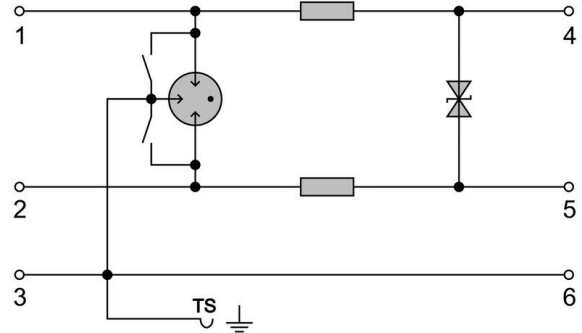
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**Drawings**



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.	<a href="#">1063110000</a>	VSSC, End plate	
GTIN (EAN)	4032248947553		
Qty.	50 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.

### 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.	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.

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## Accessories

### 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 ST		