

## VSSC4 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, $U_p(L/N-PE) < 800 \text{ V}$
Order No.	<a href="#">1063740000</a>
Type	VSSC4 CL 48VAC/DC 0.5A
GTIN (EAN)	4032248829095
Qty.	10 pc(s).

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**Technical data****Dimensions and weights**

Depth	58.5 mm	Depth (inches)	2.303 inch
Height	76 mm	Height (inches)	2.992 inch
Width	6.2 mm	Width (inches)	0.244 inch
Net weight	26.6 g		

**Temperatures**

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

**Probability of failure**

SIL PAPER	SIL Paper	SIL in compliance with IEC 61508	2
MTTF	6,008 Jahre	SFF	89.74 %
$\lambda_{ges}$	19	PFH in $1 \cdot 10^{-9}$ per hour	1.95

**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
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**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. $I_i$	500 mA
Input voltage, max. $U_i$	85 V	Internal capacity, max. $C_i$	1 nF
Internal inductance, max. $L_i$	0 $\mu$ H		

**General data**

Colour	black	Design	Terminal
Isolating function	No	Optical function display	No
Protection degree	IP20	Rail	TS 35
Segment	Measurement - Monitoring - Setting	UL 94 flammability rating	V-0
Version	Surge protection for measurement 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 $I_{max}$ (8/20 $\mu$ s) wire-wire	5 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	2.5 kA	Discharge current $I_n$ (8/20 $\mu$ s) wire-wire	2.5 kA
Discharge current, max. (8/20 $\mu$ s)	10 kA	Fuse	0.5 A
Insertion loss	5.14 MHz	Lightning test current $I_{imp}$ (10/350 $\mu$ s)	0.5 kA
Lightning test current, $I_{imp}$ (10/350 $\mu$ s) Wire-PE	0.5 kA	Max. continuous voltage, $U_c$ (AC)	60 V
Max. continuous voltage, $U_c$ (DC)	85 V	Number of poles	1
Overload - failure mode	Modus 2	Protection level $U_p$ (typ.)	< 800 V
Pulse-reset capacity	$\leq$ 110 ms	Rated current $I_N$	500 mA
Rated voltage (AC)	48 V	Rated voltage (DC)	68 V
Requirements category acc. to IEC 61643-21	C2, C3, D1	Signal transmission properties (-3 dB)	5 Mhz
Standards	IEC 61643-21, HART-compatible	Surge current-carrying capacity C2	2.5 kA 8/20 $\mu$ s 5 kV 1.2/50 $\mu$ s
Surge current-carrying capacity C3	50 A 10/1000 $\mu$ s	Surge current-carrying capacity D1	0.5 kA 10/350 $\mu$ s
Voltage type	AC/DC	Volume resistance	1.8 $\Omega$ 10 %

### Further details of approvals

GOST certificate	GOST-Zertifikat
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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>

### Ratings IECEx/ATEX/cUL

cUL certificate	cUL Certificate
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### Classifications

ETIM 6.0	EC000943	ETIM 7.0	EC000943
ETIM 8.0	EC000943	ECLASS 9.0	27-13-08-07
ECLASS 9.1	27-13-08-07	ECLASS 10.0	27-13-08-07
ECLASS 11.0	27-13-08-07	ECLASS 12.0	27-17-90-90

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**Technical data****Tender specification sheets**

Long specification		Short specification
	<p>Surge protection in a one piece, 6.2 mm wide DIN rail module for a signal circuit with 48 V UC, 2-wire technology. A current loop with max. 0.5 A 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.</p>	<p>Surge protection in a one piece, 6.2 mm wide DIN rail module for a signal circuit with 2-wire technology. Version: 48V UC</p>

**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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**Approvals**

Approvals



ROHS	Conform
UL File Number Search	E311081

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">SIL Paper</a> <a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
User Documentation	<a href="#">Beipackzettel / Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

**Data sheet**

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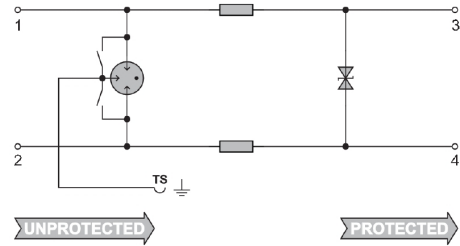
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**Drawings**



Similar to illustration



Circuit diagram

