

## VSSC4 CL FG 12VDC 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, $U_p(L/N-PE) \leq 1500 \text{ V}$
Order No.	<a href="#">1063760000</a>
Type	VSSC4 CL FG 12VDC 0.5A
GTIN (EAN)	4032248829217
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	27.4 g		

**Temperatures**

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

**Probability of failure**

SIL in compliance with IEC 61508	3	MTTF	3,936 a
SFF	93.28 %	λges	29
PFH in 1*10 <sup>-9</sup> per hour	1.95		

**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 <sub>I</sub>	500 mA
Input voltage, max. U <sub>i</sub>	15 V	Internal capacity, max. C <sub>I</sub>	1 nF
Internal inductance, max. L <sub>I</sub>	0 μH		

**General data**

Number of poles	1	Protection degree	IP20
Colour	black		

**Insulation coordination acc. to EN 50178**

Pollution severity	2	Surge voltage category	III
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## Technical data

### Rated data IEC / EN

Dielectric strength at FG against PE	≥ 500 V	Discharge current $I_{max}$ (8/20µs) wire-PE	5 kA
Discharge current $I_{max}$ (8/20µs) wire-wire	5 kA	Discharge current $I_n$ (8/20µs) wire-PE	2.5 kA
Discharge current $I_n$ (8/20µs) wire-wire	2.5 kA	Discharge current, max. (8/20 µs)	10 kA
Fuse	0.5 A	Insertion loss	791.76 kHz
Lightning test current $I_{imp}$ (10/350 µs)	0.5 kA	Lightning test current, $I_{imp}$ (10/350 µs)	0.5 kA
Max. continuous voltage, $U_c$ (DC)	15 V	Wire-PE	0.5 kA
Overload - failure mode	Modus 2	Number of poles	1
Pulse-reset capacity	≤ 20 ms	Protection level $U_p$ (typ.)	≤ 1500 V
Rated voltage (DC)	12 V	Rated current $I_N$	500 mA
Signal transmission properties (-3 dB)	750 KHz	Requirements category acc. to IEC 61643-21	C2, C3, D1
Surge current-carrying capacity C2	2.5 kA 8/20 µs 5 kV 1.2/50 µs	Standards	IEC 61643-21, HART-compatible
Surge current-carrying capacity D1	0.5 kA 10/350 µs	Surge current-carrying capacity C3	50 A 10/1000 µs
Volume resistance	1.8 Ω 10 %	Voltage type	DC

### Further details of approvals

GOST certificate GOST-Zertifikat

### 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 DC

### Ratings IECEx/ATEX/cUL

cUL certificate cUL Certificate

### Classifications

ETIM 7.0	EC000943	ETIM 8.0	EC000943
ETIM 9.0	EC000943	ETIM 10.0	EC000943
ECLASS 12.0	27-17-15-01	ECLASS 13.0	27-17-15-01
ECLASS 14.0	27-17-15-01	ECLASS 15.0	27-17-15-01

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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 floating-ground driven signal circuit with 12 V DC, 2-wire technology. A current loop with max. 0.5 A can be protected here. When the terminal is fitted, there is a simultaneous sparkover gap created to the high-impedance earth between the mounting rail (earth) and the reference potential (ground) of the protective switch. 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 floating-ground driven signal circuit with 2-wire technology. Version: 12V DC</p>

**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

**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



Approvals MAMID	<a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/</a> <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319227/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319227/-T1z1mm-S800/</a> <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319238/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319238/-T1z1mm-S800/</a> <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319252/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319252/-T1z1mm-S800/</a> <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319261/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319261/-T1z1mm-S800/</a>
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UL)	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>
User Documentation	<a href="#">Beipackzettel / Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

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**Data sheet**

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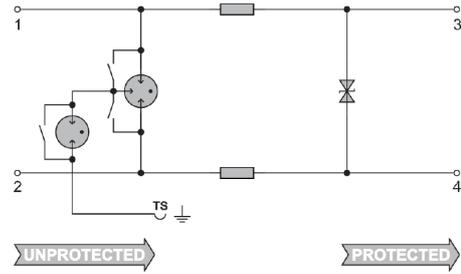
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**Drawings**



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Circuit diagram

