

**VSSC4 CL FG48VAC/DC0.5A****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="#">1063780000</a>
Type	VSSC4 CL FG48VAC/DC0.5A
GTIN (EAN)	4032248829231
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>	85 V	Internal capacity, max. C <sub>I</sub>	1 nF
Internal inductance, max. L <sub>I</sub>	0 μH		

**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 mea- surement 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

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	5.14 MHz
Lightning test current $I_{\text{imp}}$ (10/350 μs)	0.5 kA	Lightning test current, $I_{\text{imp}}$ (10/350 μs) 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.)	≤ 1500 V	Pulse-reset capacity	≤ 20 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 μs 5 kV 1.2/50 μs	Surge current-carrying capacity C3	50 A 10/1000 μs
Surge current-carrying capacity D1	0.5 kA 10/350 μs	Voltage type	AC/DC
Volume resistance	1.8 Ω 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	ETIM 9.0	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	ECLASS 13.0	27-17-90-90

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

## Long specification

Surge protection in a one piece, 6.2 mm wide DIN rail module for a float-ing-ground driven signal circuit with 48 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.

## Short specification

Surge protection in a one piece, 6.2 mm wide DIN rail module for a float-ing-ground driven signal circuit with 2-wire technology. Version: 48V DC

**Environmental Product Compliance**

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.

**Approvals**

Approvals



ROHS

Conform

UL File Number Search

UL Website

Certificate No. (UL)

E311081

**Downloads**

Approval/Certificate/Document of Conformity

[SIL Paper](#)  
[EU Konformitätserklärung / EU Declaration of Conformity](#)

Engineering Data

[CAD data – STEP](#)

User Documentation

[Beipackzettel / Instruction sheet](#)

Catalogues

[Catalogues in PDF-format](#)

Brochures

## VSSC4 CL FG48VAC/DC0.5A

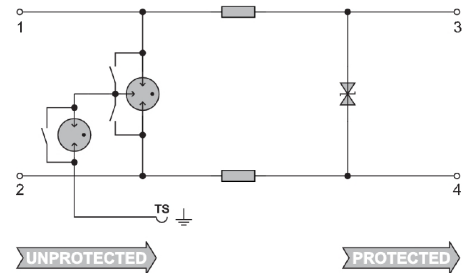
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# Drawings



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 VSSC4	Version
Order No.	<a href="#">1063120000</a>	VSSC, End plate
GTIN (EAN)	4032248947560	
Qty.	50 pc(s).	

### 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.	1,000 pc(s).	