

VSSC4 CL FG 48VAC/DC EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



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, $U_p(L/N-PE) \leq 2000 \text{ V}$
Order No.	1063820000
Type	VSSC4 CL FG 48VAC/DC EX
GTIN (EAN)	4032248829262
Qty.	1 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	12.4 mm	Width (inches)	0.488 inch
Net weight	39.8 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 ⁻⁹ per hour	1.95		

Protection Ex - Data

ATEX - dust labelling	II 1 D Ex ia IIIC T135 °C ... T85 °C Da	ATEX - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
IECEx - dust labelling	II 1 D Ex ia IIIC T135 °C ... T85 °C Da	IECEx - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
Input power, max. P _i	0.75 W	Input voltage, max. U _i	55 V
Internal capacity, max. C _i	1 nF	Internal inductance, max. L _i	0 μH
Temperature class T4/135°C (-40°C ... +120 °C) li	300 mA	Temperature class T5/100°C (-40 °C ... +85 °C) li	300 mA
Temperature class T6/85 °C (-40 °C ... +70 °C) li	300 mA		

CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input current, max. I _i	300 mA
Input voltage, max. U _i	55 V	Internal capacity, max. C _i	1 nF
Internal inductance, max. L _i	0 μH		

General data

Number of poles	1	Protection degree	IP20
Colour	Light Blue		

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
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Rated data IEC / EN

Dielectric strength at FG against PE	≥ 500 V	Discharge current I_{max} (8/20 μ s) wire-PE	5 kA
Discharge current I_{max} (8/20 μ s) wire-wire	5 kA	Discharge current I_n (8/20 μ s) wire-PE	2.5 kA
Discharge current I_n (8/20 μ s) wire-wire	2.5 kA	Discharge current, max. (8/20 μ s)	10 kA
Input voltage, max. U_i	55 V	Insertion loss	5.34 MHz
Lightning test current I_{imp} (10/350 μ s)	0.5 kA	Lightning test current, I_{imp} (10/350 μ 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.)	≤ 2000 V	Pulse-reset capacity	≤ 15 ms
Rated current I_N	300 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)		Standards	IEC61643-21:2009, DIN EN 60079-0:2009, DIN EN 60079-26:2007, DIN EN 61241-11:2006, HART-compatible
	5 Mhz	Surge current-carrying capacity C2	2.5 kA 8/20 μ s 5 kV 1.2/50 μ s
Surge current-carrying capacity C2	2.5 kA 8/20 μ s 5 kV 1.2/50 μ s	Surge current-carrying capacity C3	50 A 10/1000 μ s
Surge current-carrying capacity D1	0.5 kA 10/350 μ s	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 ²	Clamping range, max.	4 mm ²
Wire cross-section, solid, min.	0.5 mm ²	Wire cross-section, solid, max.	6 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	4 mm ²
Connection cross-section, stranded, min.	0.5 mm ²	Connection cross-section, stranded, max.	4 mm ²

Electrical data

Voltage type	AC/DC
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Ratings IECEx/ATEX/cUL

ATEX - dust labelling	II 1 D Ex ia IIIC T135 °C ... T85 °C Da	ATEX - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
ATEX certificate	ATEX Certificate	IEC Ex certificate	IECEx Zertifikat
IECEx - dust labelling	II 1 D Ex ia IIIC T135 °C ... T85 °C Da	IECEx - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
cUL certificate	cUL Certificate		

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Technical data

Classifications

ETIM 7.0	EC000943	ETIM 8.0	EC000943
ETIM 9.0	EC000943	ETIM 10.0	EC000943
ECLASS 12.0	27-17-15-02	ECLASS 13.0	27-17-15-02
ECLASS 14.0	27-17-15-02	ECLASS 15.0	27-17-15-02

Tender specification sheets

Long specification	Surge protection in a one piece, 12.4 mm wide terminal rail module for an intrinsically safe, floating-ground signal circuit with 48 VDC in 2-wire technology. A current loop (Ex ia) with max. 0.3 A can be protected here. When the terminal is fitted, a sparkover gap is simultaneously created to the high-impedance earth between the terminal rail (earth) and the reference potential (ground) of the protective circuit. Optical identification of the terminal based on the type of protective circuit and the voltage level. The terminal can be labelled. Suitable for ATEX applications. Tested according to explosion protection types in EX areas: Ex ia IIC / Ex iaD.	Short specification	Surge protection in a one piece, 12.4 mm wide terminal rail module for an intrinsically safe, floating-ground signal circuit in 2-wire technology. Version: 48 VDC Suitable for ATEX applications
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Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cI
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	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319217/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319227/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319213/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319238/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319240/-T1z1mm-S800/
ROHS	Conform

Creation date June 16, 2025 6:20:10 PM CEST

Catalogue status 07.06.2025 / We reserve the right to make technical changes.

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Technical data**Downloads**

Approval/Certificate/Document of Conformity	EG Baumusterprüfung / EC Type Examination SIL Paper EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
User Documentation	Beipackzettel / Instruction sheet Beipackzettel / Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	

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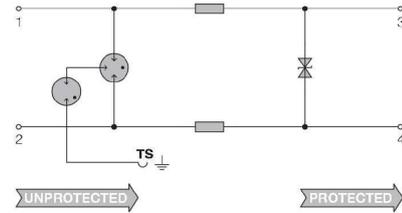
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Drawings



Similar to illustration



Circuit diagram