

VSSC4 CL FG 12VDC 0.5A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

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.	1063760000
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 ⁻⁹ 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 _I	500 mA
Input voltage, max. U _i	15 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	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} (8/20 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
Fuse	0.5 A	Insertion loss	791.76 kHz
Lightning test current I_{imp} (10/350 μ s)	0.5 kA	Lightning test current, I_{imp} (10/350 μ s)	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 μ s 5 kV 1.2/50 μ s	Standards	IEC 61643-21, HART-compatible
Surge current-carrying capacity D1	0.5 kA 10/350 μ s	Surge current-carrying capacity C3	50 A 10/1000 μ s
Volume resistance	1.8 Ω 10 %	Voltage type	DC

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	DC
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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
ECLASS 14.0	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 float-ing-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 float-ing-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



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	

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Catalogue status 26.10.2024 / We reserve the right to make technical changes.

Data sheet

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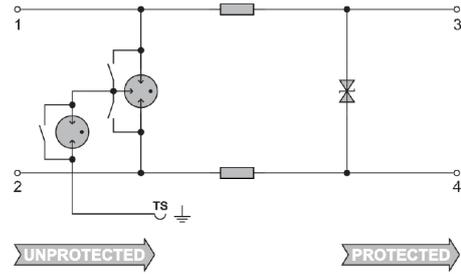
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Drawings



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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.	1063120000	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.	1609801044	Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4008190397111	Weidmueller, white
Qty.	1,000 pc(s).	