

VSSC6TRCLFG24VAC/DC0.5A**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, $U_p(L/N-PE) \leq 1650 \text{ V}$
Order No.	1064310000
Type	VSSC6TRCLFG24VAC/DC0.5A
GTIN (EAN)	4032248829675
Qty.	10 pc(s).

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Technical data**Dimensions and weights**

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.484 inch
Width	6.2 mm	Width (inches)	0.244 inch
Net weight	44 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 %	λ_{ges}	29
PFH in $1 \cdot 10^{-9}$ 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	42 V	Internal capacity, max. C_i	1 nF
Internal inductance, max. L_i	0 μ H		

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	250 MHz
Lightning test current I_{imp} (10/350 μs)	0.5 kA	Lightning test current, I_{imp} (10/350 μs) Wire-PE	0.5 kA
Max. continuous voltage, U_c (AC)	30 V	Max. continuous voltage, U_c (DC)	42 V
Number of poles	1	Overload - failure mode	Modus 2
Protection level U_p (typ.)	≤ 1650 V	Protection level U_p for C1 with 500V/250A (wire-PE)	496 V
Protection level U_p for C1 with 500V/250A (wire-wire)	63 V	Protection level U_p for C2 with 10kV/5kA (wire-PE)	1,980 V
Protection level U_p for C2 with 10kV/5kA (wire-wire)	114 V	Protection level U_p for C3 with 1kV/μs (wire-PE)	1,060 V
Protection level U_p for C3 with 1kV/μs (wire-wire)	54 V	Protection level U_p for D1 with 0.5kA (wire-wire)	84 V
Protection level on output side Wire-wire 1 kV/μs, typically	70 V	Protection level, U_p GND - PE	800 V
Protection level, U_p wire - wire	90 V	Pulse-reset capacity	≤ 20 ms
Rated current I_N	500 mA	Rated voltage (AC)	24 V
Rated voltage (DC)	34 V	Requirements category acc. to IEC 61643-21	C2, C3, D1
Signal transmission properties (-3 dB)	270 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 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

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	27-17-15-01	ECLASS 13.0	27-17-15-01
ECLASS 14.0	27-17-15-01	ECLASS 15.0	27-17-15-01

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 24 V UC, 2-wire technology. Each signal path can be opened using an isolator. 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 and a potential-free earth cable. Version: 24V UC
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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	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_319238/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319252/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319261/-T1z1mm-S800/
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UL)	E311081

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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	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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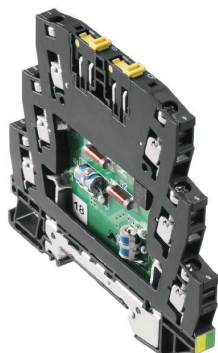
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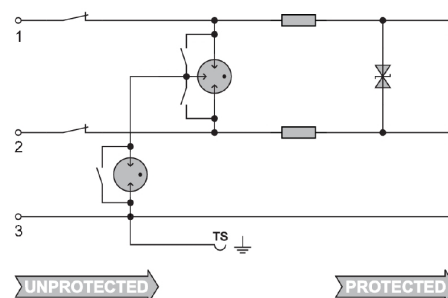
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Drawings



Similar to illustration



Circuit diagram

