

VSSC6TRCLFG24VAC/DC0.5A

Weidmüller Interfaces GmbH & Co. KG

Postfach 3030

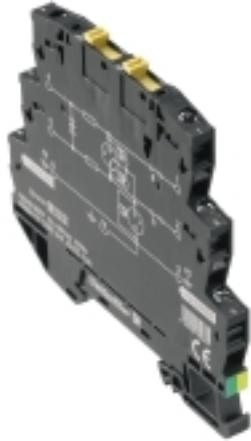
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Overvoltage coupling along the conductor path may disturb or destroy sensitive signal inputs. It is important to provide protection in the immediate vicinity of I&C devices. Weidmüller's broad product range for the I&C sector offers products in a 2-piece, 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 PAPER	SIL Paper	SIL in compliance with IEC 61508	3
MTTF	3,936 Jahre	SFF	93.28 %
λ_{ges}	29	PFH in $1 \cdot 10^{-9}$ per hour	1.95

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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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

Colour	black	Design	Terminal
Isolating function	Yes	Optical function display	No
Protection degree	IP20	Rail	TS 35
Segment	Measurement - Monitoring - Setting	Testing option	Functional screw with test plug receptacle, connections 1, 2, 4, 5
UL 94 flammability rating	V-0	Version	Surge protection for measurement and control

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
Fuse	0.5 A	Insertion loss	250 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)	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/ μ s (wire-PE)	1,060 V
Protection level U_p for C3 with 1kV/ μ s (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/ μ s, 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 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

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

Ratings IECEx/ATEX/cUL

cUL certificate cUL Certificate

Classifications

ETIM 6.0	EC000943	ETIM 7.0	EC000943
ETIM 8.0	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

Creation date May 27, 2022 8:34:30 AM CEST

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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 floating-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	www.weidmueller.com	Surge protection in a one piece, 6.2 mm wide DIN rail module for a floating-ground driven signal circuit with 2-wire technology and a potential-free earth cable. Version: 24V UC
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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	E311081

Downloads

Approval/Certificate/Document of Conformity	SIL Paper EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data - STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Beipackzettel / Instruction sheet
Catalogues	Catalogues in PDF-format
Brochures	

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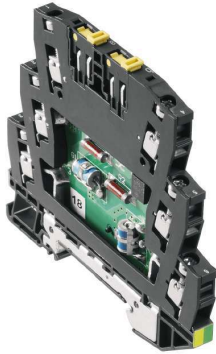
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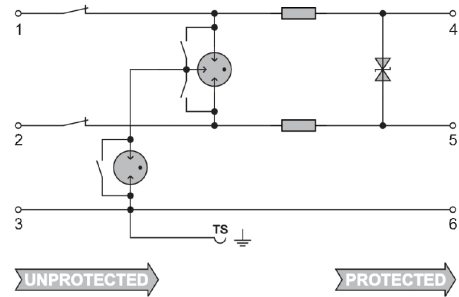
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Drawings



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Circuit diagram

