

## VSSC6TRCLFG24VAC/DC0.5A

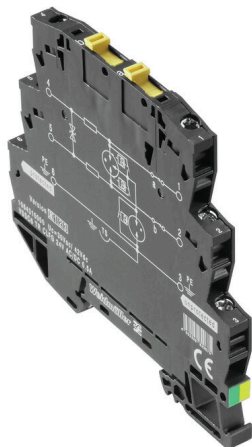
**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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
Order No.	<a href="#">1064310000</a>
Type	VSSC6TRCLFG24VAC/DC0.5A
GTIN (EAN)	4032248829675
Qty.	10 items

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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate No. (UL)	E311081

Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.4842 inch
Width	6.2 mm	Width (inches)	0.2441 inch
Net weight	44 g		

Temperatures

Storage temperature	-40 °C...80 °C	Operating temperature	-40 °C...70
Humidity	5...96 %		

Probability of failure

SIL in compliance with IEC 61508	3	MTTF	3936 a
SFF	93.28 %	λges	29
PFH in 1*10 <sup>-9</sup> per hour	1.95		

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

Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL Zertifikat - PDF/ E311081VOL1SEC3.pdf (application/pdf)
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CSA protection data

Gas group D	IIA	Gas groups A, B	IIC
Input-current, max. Ii	500 mA	Gas group C	IIB
Internal inductance, max. LI	0 µH	Internal capacity, max. CI	1 nF
Input voltage, max. Ui	42 V		

General data

Optical function display	No	Segment	Measurement - Monitoring - Setting
Version	Surge protection for measurement and control	Design	Terminal
UL 94 flammability rating	V-0	Colour	black
Protection degree	IP20	Mounting rail	TS 35

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### Technical data

Isolating function	Yes	Testing option	Functional screw with test plug receptacle, connections 1, 2, 4, 5
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#### Insulation coordination acc. to EN 50178

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

Number of poles	1	Rated voltage (AC)	24 V
Rated voltage (DC)	34 V	Rated current I <sub>N</sub>	500 mA
Protection level on output side Wire-wire	70 V	Voltage type	AC/DC
1 kV/μs, typically		Volume resistance	1.8 Ω 10 %
Fuse protection	0.5 A	Lightning test current limp (10/350 μs)	0.5 kA
Standards	IEC 61643-2-1, HART-compatible	Dielectric strength at FG against PE	≥ 500 V
Discharge current, max. (8/20 μs)	10 kA	Insertion loss	250 MHz
Requirements category acc. to IEC 61643-2-1	C2, C3, D1	Max. continuous voltage, U <sub>c</sub> (DC)	42 V
Max. continuous voltage, U <sub>c</sub> (AC)	30 V	Surge current-carrying capacity C3	50 A 10/1000 μs
Surge current-carrying capacity D1	0.5 kA 10/350 μs	Signal transmission properties (-3 dB)	270 Mhz
Pulse-reset capacity	≤ 20 ms	Overload - failure mode	Modus 2
Lightning test current, limp (10/350 μs) Wire-PE	0.5 kA	Protection level UP for C1 with 500V/250A (wire-wire)	63 V
Rated load current I <sub>L</sub>	500 mA	Discharge current I <sub>n</sub> (8/20μs) wire-PE	2.5 kA
Discharge current I <sub>n</sub> (8/20μs) wire-wire	2.5 kA	Discharge current I <sub>max</sub> (8/20μs) wire-wire	5 kA
Discharge current I <sub>max</sub> (8/20μs) wire-PE	5 kA	Protection level UP for D1 with 0.5kA (wire-wire)	84 V
Protection level UP for C3 with 1kV/μs (wire-wire)	54 V	Protection level UP for C2 with 10kV/5kA (wire-wire)	114 V
Protection level UP for C3 with 1kV/μs (wire-PE)	1060 V	Protection level UP for C1 with 500V/250A (wire-PE)	496 V
Surge current-carrying capacity C2	2.5 kA 8/20 μs 5 kV 1.2/50 μs		
Protection level UP for C2 with 10kV/5kA (wire-PE)	1980 V		

#### Further details of approvals

GOST certificate	GOST-Zertifikat - PDF/7950_n1-n4.pdf (application/pdf)
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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>

#### Electrical data

Voltage type	AC/DC
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**Technical data**

**General data**

Number of poles	1	Protection degree	IP20
Colour	black		

**Ratings IECEx/ATEX/cUL**

cUL certificate	cUL Certificate - pdf/ VSSC.PDF (application/ pdf)
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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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**Classifications**

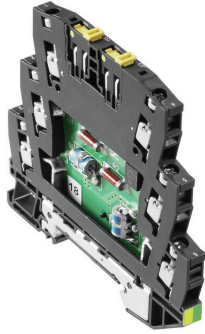
ETIM 8.0	EC000943	ETIM 9.0	EC000943
ETIM 10.0	EC000943	ECLASS 14.0	27-17-15-01
ECLASS 15.0	27-17-15-01		

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Drawings



Similar to illustration



UNPROTECTED

PROTECTED

Circuit diagram

