

## VSSC

### VSSC6TRCLFG24VAC/DC0.5A

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

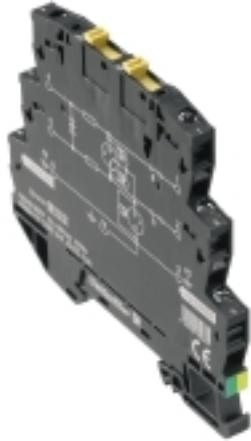
D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

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

Type	VSSC6TRCLFG24VAC/DC0.5A
Order No.	<a href="#">1064310000</a>
Version	Surge protection for instrumentation and control, 24 V, 34 V, 500 mA, IEC 61643-21, HART-compatible
GTIN (EAN)	4032248829675
Qty.	10 pc(s).

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**Technical data****Dimensions and weights**

Width	6.2 mm	Width (inches)	0.244 inch
Height	88.5 mm	Height (inches)	3.484 inch
Depth	81 mm	Depth (inches)	3.189 inch
Net weight	44 g		

**Temperatures**

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

**Probability of failure**

λges	29	MTTF	3,936 Jahre
PFH in 1*10 <sup>-9</sup> per hour	1.95	SFF	93.28 %
SIL in compliance with IEC 61508	3		

**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 <sub>i</sub>	500 mA
Input voltage, max. U <sub>i</sub>	42 V	Internal capacity, max. C <sub>i</sub>	1 nF
Internal inductance, max. L <sub>i</sub>	0 μH		

**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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**Technical data****Rated data IEC / EN**

Rated voltage (AC)	24 V	Rated voltage (DC)	34 V
Voltage type	AC/DC	Max. continuous voltage, $U_c$ (AC)	30 V
Max. continuous voltage, $U_c$ (DC)	42 V	Discharge current, max. (8/20 $\mu$ s)	10 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	2.5 kA	Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE	5 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-wire	2.5 kA	Discharge current $I_{max}$ (8/20 $\mu$ s) wire-wire	5 kA
Lightning test current $I_{imp}$ (10/350 $\mu$ s)	0.5 kA	Lightning test current, $I_{imp}$ (10/350 $\mu$ s) Wire-PE	0.5 kA
Fuse	0.5 A	Standards	IEC 61643-21, HART-compatible
Protection level $U_p$ (typ.)	$\leq 1650$ V	Protection level $U_p$ for C1 with 500V/250A (wire-PE)	496 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/ $\mu$ s (wire-PE)	1,060 V	Protection level $U_p$ for C3 with 1kV/ $\mu$ 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/ $\mu$ s, typically	70 V
Protection level, $U_p$ GND - PE	800 V	Dielectric strength at FG against PE	$\geq 500$ V
Insertion loss	250 MHz	Number of poles	1
Overload - failure mode	Modus 2	Protection level $U_p$ for C1 with 500V/250A (wire-wire)	63 V
Protection level, $U_p$ wire - wire	90 V	Pulse-reset capacity	$\leq 20$ ms
Rated current $I_N$	500 mA	Requirements category acc. to IEC 61643-21	C2, C3, D1
Signal transmission properties (-3 dB)	270 Mhz	Surge current-carrying capacity C2	2.5 kA 8/20 $\mu$ s 5 kV 1.2/50 $\mu$ s
Surge current-carrying capacity C3	50 A 10/1000 $\mu$ s	Surge current-carrying capacity D1	0.5 kA 10/350 $\mu$ s
Volume resistance	1.8 $\Omega$ 10 %		

**Further details of approvals**

GOST certificate	GOST-Zertifikat
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**Connection data**

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>		

**Classifications**

ETIM 6.0	EC000943	ETIM 7.0	EC000943
eClass 9.0	27-13-08-07	eClass 9.1	27-13-08-07
eClass 10.0	27-13-08-07	UNSPSC	30-21-19-21

**Data sheet****VSSC  
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**Technical data****Approvals**

Approvals



ROHS Conform

**Downloads**

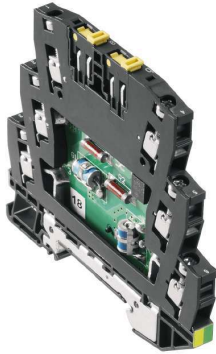
Approval/Certificate/Document of Conformity	<a href="#">SIL Paper</a> <a href="#">CE PAPER</a> <a href="#">Declaration of Conformity</a>
Brochure/Catalogue	<a href="#">CAT 4.4 ELECTR 16/17 EN</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
Engineering Data	<a href="#">STEP</a>
User Documentation	<a href="#">Instruction sheet VSSC</a>

**Data sheet**

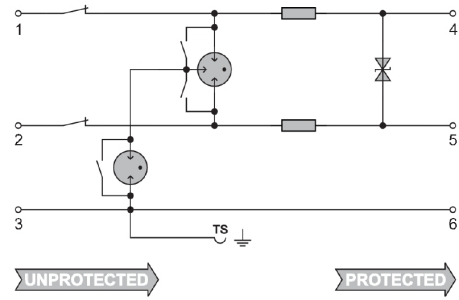
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**Drawings**



Similar to illustration



Circuit diagram

