

## VSSC

### VSSC6TRCLFG48VAC/DC0.5A

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

D-32758 Detmold

Germany

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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

Type	VSSC6TRCLFG48VAC/DC0.5A
Order No.	<a href="#">1064320000</a>
Version	Surge protection for instrumentation and control, 48 V, 68 V, 500 mA, IEC 61643-21
GTIN (EAN)	4032248829682
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**

$\lambda_{ges}$	29	MTTF	3,936 Jahre
PFH in $1 \cdot 10^{-9}$ per hour	1.95	SFF	93.28 %
SIL in compliance with IEC 61508	3		

**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. $U_i$	85 V	Internal capacity, max. $C_i$	1 nF
Internal inductance, max. $L_i$	0 $\mu$ H		

**General data**

Colour	Black	Design	Terminal
Isolating function	Yes	Mounting rail	TS 35
Optical function display	No	Protection degree	IP20
Segment	Instrumentation and Control	Testing option	Functional screw with test plug receptacle, connections 1, 2, 4, 5
UL 94 flammability rating	V-0		

**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 $\mu$ s) wire-PE	5 kA
Discharge current $I_{\max}$ (8/20 $\mu$ s) wire-wire	5 kA	Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	2.5 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-wire	2.5 kA	Discharge current, max. (8/20 $\mu$ s)	10 kA
Fuse	0.5 A	Insertion loss	250 MHz
Lightning test current $I_{\text{imp}}$ (10/350 $\mu$ s)	0.5 kA	Lightning test current, $I_{\text{imp}}$ (10/350 $\mu$ s) Wire-PE	0.5 kA
Max. continuous voltage, $U_c$ (AC)	60 V	Max. continuous voltage, $U_c$ (DC)	85 V
Overload - failure mode	Modus 2	Protection level $U_p$ (typ.)	≤ 1550 V
Protection level on output side Wire-wire 1 kV/ $\mu$ s, typically	150 V	Protection level, $U_p$ GND - PE	800 V
Protection level, $U_p$ wire - wire	200 V	Pulse-reset capacity	≤ 20 ms
Rated current $I_N$	500 mA	Rated voltage (AC)	48 V
Rated voltage (DC)	68 V	Requirements category acc. to IEC 61643-21	C2, C3, D1
Signal transmission properties (-3 dB)	270 Mhz	Standards	IEC 61643-21
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	Voltage type	AC/DC
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, Torx® T15, Slotted 0.8 x 4	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>		

**Rated data UL**

Certificate No. (UL)	E311081	UL certificate	UL Zertifikat
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**Ratings IECEx/ATEX/cUL**

cUL certificate	cUL Certificate
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**Classifications**

ETIM 3.0	EC000943	ETIM 4.0	EC000943
ETIM 5.0	EC000943	ETIM 6.0	EC000943
UNSPSC	30-21-19-21	eClass 5.1	27-13-08-01
eClass 6.2	27-13-08-05	eClass 7.1	27-13-08-09
eClass 8.1	27-13-08-11	eClass 9.0	27-13-08-11
eClass 9.1	27-13-08-07		

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**Data sheet**

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**Technical data**

**Product information**

Descriptive text ordering data	End plate AP VSSC6 1063110000
Descriptive text accessories	Screwdriver: Torx® 9009170000 Slot 0.8x4.0 9008340000 Test plug PS2.3 0180400000 EMC Set: 1067470000 Marker: WS 10/6 1818400000; DEK 6 0468560000; DEK 5 176826; SNAPMARK 1805880000

**Approvals**

Approvals



ROHS Conform

**Downloads**

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

**Data sheet**

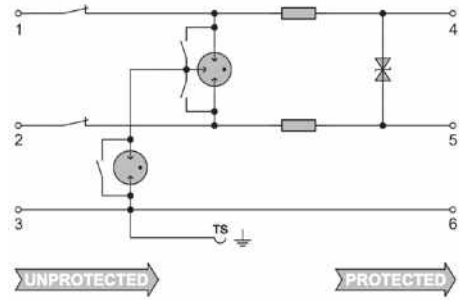
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**Drawings**



Similar to illustration



Circuit diagram

