

## VSSC6 TR SL FG 24VAC/DC EX

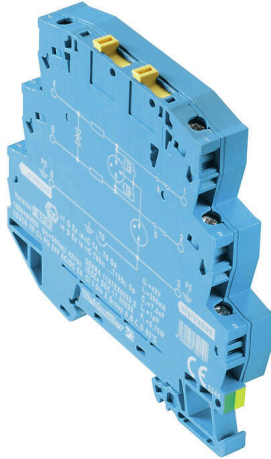
**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)



Similar to illustration



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="#">1421440000</a>
Type	VSSC6 TR SL FG 24VAC/DC EX
GTIN (EAN)	4050118225228
Qty.	1 items

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Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

Width	12.4 mm	Width (inches)	0.4882 inch
Net weight	14.61 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	1342 a
SFF	96.67 %	λges	54
PFH in 1*10 <sup>-9</sup> per hour	1.8		

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

Protection Ex - Data

ATEX - dust labelling	II 1 D Ex ia III C T135 °C ... T85 °C Da	ATEX - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
IECEx - dust labelling	II 1 D Ex ia III C T135 °C ... T85 °C Da	IECEx - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
Input power, max. PI	0.75 W	Internal capacity, max. CI	2 nF
Internal inductance, max. LI	0 µH	Temperature class T4/135°C (-40°C ... +120 °C) li	300 mA
Temperature class T5/100°C (-40 °C ... +85 °C) li	300 mA	Temperature class T6/85 °C (-40 °C ... +70 °C) li	300 mA

CSA protection data

Gas group D	IIA	Gas groups A, B	IIC
Input-current, max. II	300 mA	Gas group C	IIB
Internal inductance, max. LI	0 µH	Internal capacity, max. CI	2 nF

General data

Optical function display	No	Segment	Measurement - Monitoring - Setting
Version	Surge protection for measurement and control	Colour	Light Blue

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## Technical data

Protection degree	IP20	Mounting rail	TS 35
Isolating function	Yes	Testing option	Functional screw with test plug receptacle, connections 1, 2, 4, 5

## 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 current I <sub>N</sub>	300 mA	Protection level on output side Wire-wire	70 V 1 kV/μs, typically
Volume resistance	1.8 Ω 10 %	Lightning test current limp (10/350 μs)	1 kA
Discharge current, max. (8/20 μs)	10 kA	Dielectric strength at FG against PE	≥ 500 V
Surge current-carrying capacity D1	1 kA 10/350 μs	Surge current-carrying capacity C3	50 A 10/1000 μs
Pulse-reset capacity	≤ 20 ms	Signal transmission properties (-3 dB)	270 Mhz
Lightning test current, limp (10/350 μs) Wire-PE	0.5 kA	Overload - failure mode	Modus 2
Rated load current I <sub>L</sub>	300 mA	Discharge current I <sub>n</sub> (8/20μs) wire-wire	2.5 kA
Discharge current I <sub>max</sub> (8/20μs) wire-PE	10 kA	Discharge current I <sub>max</sub> (8/20μs) wire-wire	10 kA
Surge current-carrying capacity C2	2.5 kA 8/20 μs 5 kV 1.2/50 μs		

## 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>

## General data

Number of poles	1	Protection degree	IP20
Colour	Light Blue		

## Ratings IECEx/ATEX/cUL

ATEX - dust labelling	II 1 D Ex ia IIIC T135 °C ... T85 °C Da	ATEX - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
IECEx - dust labelling	II 1 D Ex ia IIIC T135 °C ... T85 °C Da	IECEx - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
cUL certificate	cUL Certificate - pdf/ VSSC.PDF (application/ pdf)		

## 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

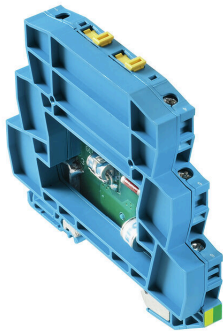
ETIM 8.0	EC000943	ETIM 9.0	EC000943
ETIM 10.0	EC000943	ECLASS 14.0	27-17-15-02
ECLASS 15.0	27-17-15-02		

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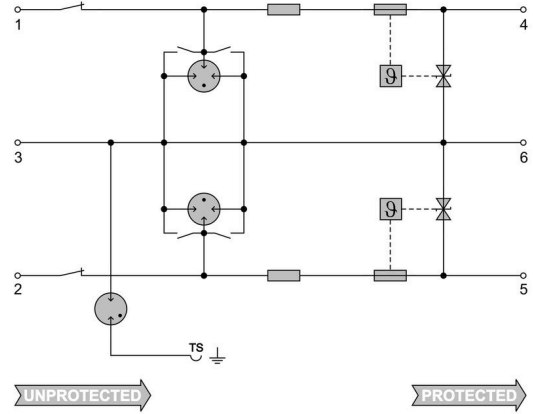
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Drawings



Similar to illustration



Circuit diagram