

VSSC

VSSC6SLTRFG24VAC/DC EX

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
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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

Type	VSSC6SLTRFG24VAC/DC EX
Order No.	1421440000
Version	Surge protection for instrumentation and control, 24 V, 34 V, 300 mA, IEC61643-21:2009, DIN EN 60079-0:2009, DIN EN 60079-26:2007, DIN EN 61241-11:2006
GTIN (EAN)	4050118225228
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Width	12.4 mm	Width (inches)	0.488 inch
Height	88.5 mm	Height (inches)	3.484 inch
Depth	81 mm	Depth (inches)	3.189 inch
Net weight	0.081 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

λ_{ges}	54	MTTF	1,342 Jahre
PFH in $1 \cdot 10^{-9}$ per hour	1.8	SFF	96.67 %
SIL in compliance with IEC 61508	3		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Protection Ex - Data

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
Input power, max. P_i	0.75 W	Input voltage, max. U_i	42 V
Internal capacity, max. C_i	2 nF	Internal inductance, max. L_i	0 μ H
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 C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input current, max. I_i	300 mA
Input voltage, max. U_i	42 V	Internal capacity, max. C_i	2 nF
Internal inductance, max. L_i	0 μ H		

General data

Colour	Light Blue	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

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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} (8/20μs) wire-PE	10 kA
Discharge current I_{max} (8/20μs) wire-wire	10 kA	Discharge current I_n (8/20μs) wire-PE	2.5 kA
Discharge current I_n (8/20μs) wire-wire	2.5 kA	Discharge current, max. (8/20 μs)	10 kA
Input voltage, max. U_i	42 V	Insertion loss	250 MHz
Lightning test current I_{imp} (10/350 μs)	1 kA	Lightning test current, I_{imp} (10/350 μs) Wire-PE	0.5 kA
Max. continuous voltage, U_c (AC)	30 V	Max. continuous voltage, U_c (DC)	42 V
Overload - failure mode	Modus 2	Protection level U_p (typ.)	≤ 1870 V
Protection level on output side Wire-wire	1 kV/μs, typically	Protection level, U_p GND - PE	2,200 V
Protection level, U_p wire - wire	70 V	Pulse-reset capacity	≤ 20 ms
Rated current I_N	300 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	IEC61643-21:2009, DIN EN 60079-0:2009, DIN EN 60079-26:2007, DIN EN 61241-11:2006
Surge current-carrying capacity C2	2.5 kA 8/20 μs 5 kV 1.2/50 μs	Surge current-carrying capacity C3	50 A 10/1000 μs
Surge current-carrying capacity D1	1 kA 10/350 μs	Voltage type	AC/DC
Volume resistance	1.8 Ω 10 %		

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 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
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Classifications

ETIM 3.0	EC000943	ETIM 5.0	EC000943
ETIM 6.0	EC000943	UNSPSC	30-21-19-21
eClass 5.1	27-13-08-01	eClass 6.2	27-14-02-01
eClass 7.1	27-13-08-09	eClass 8.1	27-13-08-11
eClass 9.0	27-13-08-07	eClass 9.1	27-13-08-07

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Technical data

Approvals

Approvals



ROHS

Conform

Downloads

Approval/Certificate/Document of Conformity	SIL Paper Declaration of Conformity Declaration of Conformity
Brochure/Catalogue	CAT 4.4 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Instruction sheet VSSC Instruction sheet VSSC EX

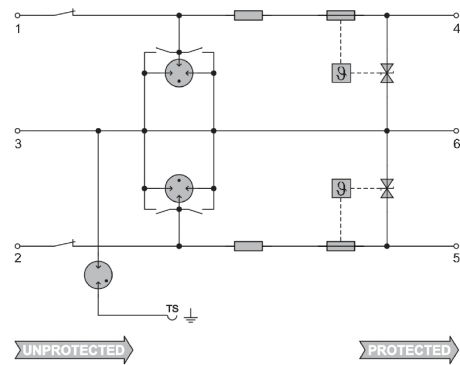
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Drawings



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Circuit diagram