

VSSC VSSC6TRCLFG24VAC/DC EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16

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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	VSSC6TRCLFG24VAC/DC EX
Order No.	1066490000
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 61241-1-1:2006, HART-compatible
GTIN (EAN)	4032248820122
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	60.6 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 ⁻⁹ per hour	1.95	SFF	93.28 %
SIL in compliance with IEC 61508	3		

Environmental Product Compliance

REACH SVHC Lead 7439-92-1

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 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 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	1 nF
Internal inductance, max. L _I	0 μH		

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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Technical data**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} (8/20 μ s) wire-PE	5 kA
Discharge current I_{max} (8/20 μ s) wire-wire	5 kA	Discharge current I_n (8/20 μ s) wire-PE	2.5 kA
Discharge current I_n (8/20 μ s) wire-wire	2.5 kA	Discharge current, max. (8/20 μ s)	10 kA
Input voltage, max. U_i	42 V	Insertion loss	250 MHz
Lightning test current I_{imp} (10/350 μ s)	0.5 kA	Lightning test current, I_{imp} (10/350 μ s) 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/ μ s, typically	70 V	Protection level, U_p wire - wire	90 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, HART-compatible	Surge current-carrying capacity C2	2.5 kA 8/20 μ s 5 kV 1.2/50 μ s
Surge current-carrying capacity C3	50 A 10/1000 μ s	Surge current-carrying capacity D1	0.5 kA 10/350 μ s
Voltage type	DC	Volume resistance	1.8 Ω 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 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

ATEX certificate	ATEX Certificate	IEC Ex certificate	IECEX Zertifikat
cUL certificate	cUL Certificate		

Data sheet

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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	27-14-02-01	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		

Approvals

Approvals



ROHS Conform

Downloads

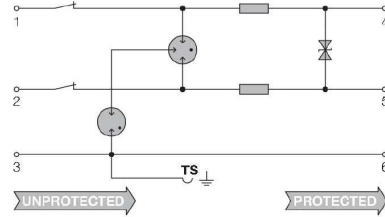
Approval/Certificate/Document of Conformity	SIL Paper Declaration of Conformity Declaration of Conformity
Brochure/Catalogue	CAT 4.4 ELECTR 16/17 EN
Engineering Data	EPLAN_WSCAD
Engineering Data	STEP
User Documentation	Instruction sheet VSSC Type examination certificate Instruction sheet VSSC EX

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Drawings

Similar to illustration



Circuit diagram