

VSSC6 RTD EX

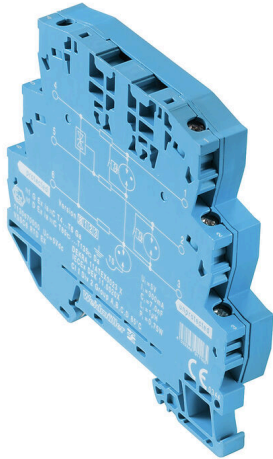
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

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

Version	Surge protection for instrumentation and control, Surge protection for measurement and control
Order No.	1130670000
Type	VSSC6 RTD EX
GTIN (EAN)	4032248911165
Qty.	1 items

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Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.4842 inch
Width	12.4 mm	Width (inches)	0.4882 inch
Net weight	15 g		

Temperatures

Storage temperature	-40 °C...80 °C	Ambient temperature	-40 °C...70 °C
Operating temperature	-40 °C...70	Humidity	5...96 %

Probability of failure

SIL in compliance with IEC 61508	3	MTTF	1871 a
SFF	94.67 %	λges	61
PFH in 1*10 ⁻⁹ per hour	3.25		

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 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. PI	0.75 W	Internal capacity, max. CI	7 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	7 nF

General data

Optical function display	No	Segment	Measurement - Monitoring - Setting
Version	Surge protection for measurement and control	UL 94 flammability rating	V-0

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Technical data

Colour	Light Blue	Protection degree	IP20
Mounting rail	TS 35	Isolating function	No

Insulation coordination acc. to EN 50178

Surge voltage category	III	Pollution severity	2
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Rated data IEC / EN

Rated voltage (DC)	1 V	Rated current I _N	300 mA
Protection level, UP wire - wire	1.8 kV	Voltage type	DC
Volume resistance	1.8 Ω 10 %	Frequency range, max.	120 MHz
Standards	IEC 62305, IEC 61643-21	Lightning test current I _{imp} (10/350 μs)	0.5 kA
Discharge current, max. (8/20 μs)	10 kA	Dielectric strength at FG against PE	≥ 500 V
Requirements category acc. to IEC 61643-21	C2, D1	Surge current-carrying capacity D1	0.5 kA 10/350 μs
Surge current-carrying capacity C3	10 A 10/1000 μs	Pulse-reset capacity	≤ 10 ms
Signal transmission properties (-3 dB)	120 MHz	Lightning test current, I _{imp} (10/350 μs) Wire-PE	0.5 kA
Overload - failure mode	Modus 2	Rated load current I _L	300 mA
Discharge current I _n (8/20 μs) wire-wire	2.5 kA	Discharge current I _n (8/20 μs) wire-PE	2.5 kA
Discharge current I _{max} (8/20 μs) wire-PE5 kA		Discharge current I _{max} (8/20 μs) wire-wire	5 kA
Surge current-carrying capacity C2	2.5 kA 8/20 μs 5 kV 1.2/50 μs		

Further details of approvals

GOST certificate	GOST-Zertifikat - PDF/7950_n1-n4.pdf (application/pdf)
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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		

Electrical data

Voltage type	DC
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General data

Protection degree	IP20	Colour	Light Blue
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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
ATEX certificate	ATEX Certificate	IEC Ex certificate	IECEX Zertifikat

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Technical data

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
Marking EN 60079	Ex ec nC IIC T4 Gc	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.

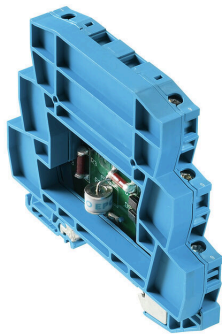
Classifications

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		

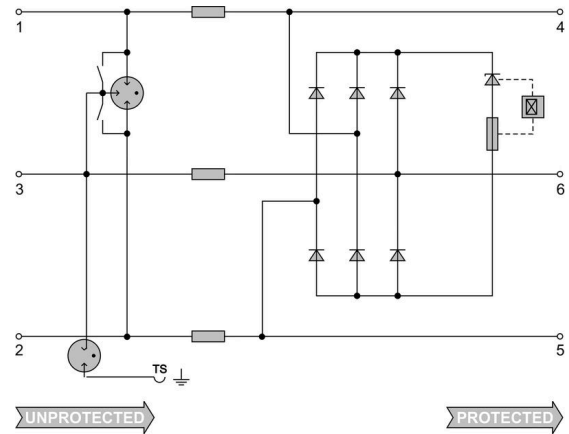
Tender specification sheets

Long specification	Surge protection in a one piece, 6.2 mm wide DIN rail module for a PT100 signal circuit with 12 V DC, 3-wire technology. A 3-wire signal with max. 0.3A can be protected here. When the terminal is fitted, there is a simultaneous sparkover gap created to the high-impedance earth between the mounting rail (earth) and the reference potential (ground) of the protective switch. Optical identification of the terminal based on the type of protected switching and the voltage level. The terminal can be labelled or marked. ATEX version. Tested to Ex area ignition protection types: Ex ia IIC / Ex iaD	Short specification	Surge protection in a one piece, 12.4 mm wide terminal rail module for a PT 100 signal circuit in 3-wire technology. Version: 5 VDC ATEX version. Tested according to explosion protection types in EX areas: Ex ia IIC / Ex iaD.
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Drawings



Similar to illustration



Circuit diagram

