

VSSC
VSSC6 RTD**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

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

Type	VSSC6 RTD
Order No.	1139710000
Version	Surge protection for instrumentation and control, 1 V, 300 mA, IEC 61643-21
GTIN (EAN)	4032248921713
Qty.	10 pc(s).

VSSC
VSSC6 RTD

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

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	43.8 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	63	MTTF	1,812 Jahre
PFH in 1*10 ⁻⁹ per hour	3.75	SFF	94.05 %
SIL in compliance with IEC 61508	3		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL Zertifikat
----------------------	---------	----------------	---------------

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	5 V	Internal capacity, max. C _I	9 nF
Internal inductance, max. L _i	0 μH		

General data

Colour	black	Design	Terminal
Optical function display	No	Protection degree	IP20
Rail	TS 35	Segment	Measurement - Monitoring - Setting
UL 94 flammability rating	V-0	Version	Surge protection for measurement and control

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
--------------------	---	------------------------	-----

VSSC
VSSC6 RTD

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Rated data IEC / EN**

Rated voltage (DC)	1 V	Voltage type	DC
Max. continuous voltage, U_c (DC)	5 V	Discharge current, max. (8/20 μ s)	10 kA
Discharge current I_n (8/20 μ s) wire-PE	2.5 kA	Discharge current I_{max} (8/20 μ s) wire-PE	5 kA
Discharge current I_n (8/20 μ s) wire-wire	2.5 kA	Discharge current I_{max} (8/20 μ s) wire-wire	5 kA
Lightning test current I_{imp} (10/350 μ s)	0.5 kA	Standards	IEC 61643-21
Protection level U_p (typ.)	150 V	Insertion loss	117.08 MHz
Number of poles	1	Overload - failure mode	Modus 2
Protection level, U_p wire - wire	15 V	Pulse-reset capacity	≤ 10 ms
Rated current I_N	300 mA	Requirements category acc. to IEC 61643-21	C2, C3, D1
Signal transmission properties (-3 dB)	113.6 MHz	Surge current-carrying capacity C2	2.5 kA 8/20 μ s 5 kV 1.2/50 μ s
Surge current-carrying capacity C3	10 A 10/1000 μ s	Surge current-carrying capacity D1	0.5 kA 10/350 μ s
Volume resistance	1.8 Ω 10 %		

Further details of approvals

GOST certificate GOST-Zertifikat

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		

Classifications

ETIM 6.0	EC000943	ETIM 7.0	EC000943
eClass 9.0	27-13-08-07	eClass 9.1	27-13-08-07
eClass 10.0	27-13-08-07	UNSPSC	30-21-19-21

Approvals

Approvals



ROHS Conform

Downloads

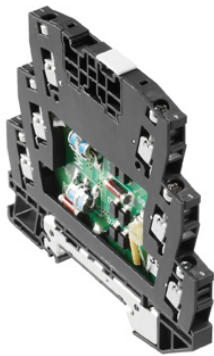
Approval/Certificate/Document of Conformity	SIL Paper CE PAPER Declaration of Conformity
Brochure/Catalogue	CAT 4.4 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Instruction sheet VSSC

Creation date August 16, 2020 4:29:35 PM CEST

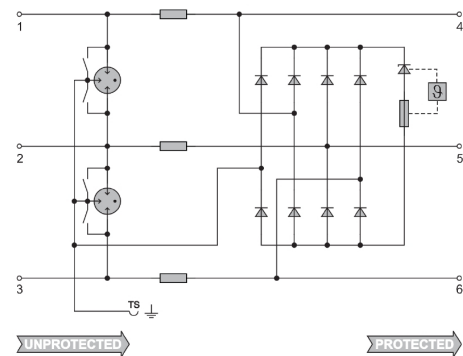
VSSC VSSC6 RTD

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Drawings



Similar to illustration



Circuit diagram

