

VSSC

VSSC6 TRCL24VAC/DC0.5A

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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	VSSC6 TRCL24VAC/DC0.5A
Order No.	1064230000
Version	Surge protection for instrumentation and control, 24 V, 34 V, 500 mA, IEC 61643-21, HART-compatible
GTIN (EAN)	4032248829590
Qty.	10 pc(s).

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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	43.4 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}	19	MTTF	6,008 Jahre
PFH in 1*10 ⁻⁹ per hour	1.95	SFF	89.74 %
SIL in compliance with IEC 61508	2		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL Zertifikat
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CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input current, max. I _i	500 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	black	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

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
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Technical data

Rated data IEC / EN

Rated voltage (AC)	24 V	Rated voltage (DC)	34 V
Voltage type	AC/DC	Max. continuous voltage, U_c (AC)	30 V
Max. continuous voltage, U_c (DC)	42 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	Lightning test current, I_{imp} (10/350 μ s) Wire-PE	0.5 kA
Fuse	0.5 A	Standards	IEC 61643-21, HART-compatible
Protection level U_p (typ.)	900 V	Protection level U_p for C1 with 500V/250A (wire-PE)	456 V
Protection level U_p for C2 with 10kV/5kA (wire-PE)	960 V	Protection level U_p for C2 with 10kV/5kA (wire-wire)	108 V
Protection level U_p for C3 with 1kV/ μ s (wire-PE)	572 V	Protection level U_p for C3 with 1kV/ μ s (wire-wire)	55 V
Protection level U_p for D1 with 0.5kA (wire-wire)	94 V	Protection level on output side Wire-wire 1 kV/ μ s, typically	70 V
Insertion loss	250 MHz	Number of poles	1
Overload - failure mode	Modus 2	Protection level U_p for C1 with 500V/250A (wire-wire)	62 V
Protection level, U_p wire - wire	90 V	Pulse-reset capacity	≤ 170 ms
Rated current I_N	500 mA	Requirements category acc. to IEC 61643-21	C2, C3, D1
Signal transmission properties (-3 dB)	270 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	50 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
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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		

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

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Technical data

Approvals

Approvals



ROHS Conform

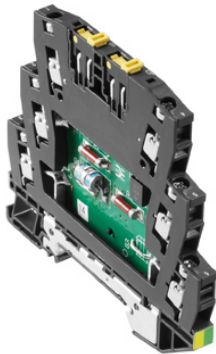
Downloads

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

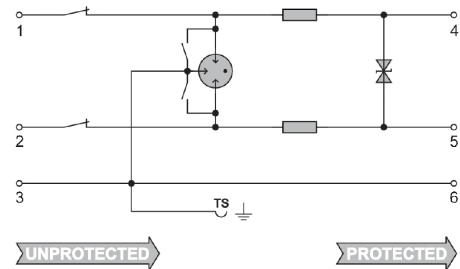
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Drawings



Similar to illustration



Circuit diagram

