

VSSC6 TRCL24VAC/DC0.5A

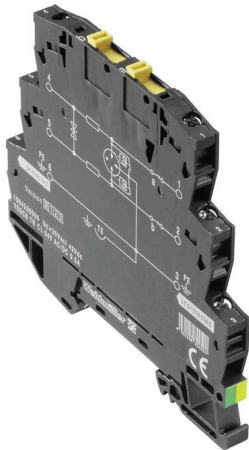
Weidmüller Interface GmbH & Co. KG

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.	1064230000
Type	VSSC6 TRCL24VAC/DC0.5A
GTIN (EAN)	4032248829590
Qty.	10 items

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Technical data

Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (UL) E311081

Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.4842 inch
Width	6.2 mm	Width (inches)	0.2441 inch
Net weight	43.4 g		

Temperatures

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

Probability of failure

SIL in compliance with IEC 61508	2	MTTF	6008 a
SFF	89.74 %	λges	19
PFH in 1*10 ⁻⁹ per hour	1.95		

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

Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL Zertifikat - PDF/ E311081VOL1SEC3.pdf (application/pdf)
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CSA protection data

Gas group D	IIA	Gas groups A, B	IIC
Input-current, max. I _I	500 mA	Gas group C	IIB
Internal inductance, max. L _I	0 μH	Internal capacity, max. C _I	1 nF
Input voltage, max. U _i	42 V		

General data

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

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Technical data

Isolating function	Yes	Testing option	Functional screw with test plug receptacle, connections 1, 2, 4, 5
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Insulation coordination acc. to EN 50178

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

Number of poles	1	Rated voltage (AC)	24 V
Rated voltage (DC)	34 V	Rated current I _N	500 mA
Protection level on output side Wire-wire 1 kV/μs, typically	70 V	Voltage type	AC/DC
Fuse protection	0.5 A	Volume resistance	1.8 Ω 10 %
Standards	IEC 61643-2-1, HART-compatible	Lightning test current limp (10/350 μs)	0.5 kA
Discharge current, max. (8/20 μs)	10 kA	Requirements category acc. to IEC 61643-2-1	C2, C3, D1
Insertion loss	250 MHz	Max. continuous voltage, U _c (AC)	30 V
Max. continuous voltage, U _c (DC)	42 V	Surge current-carrying capacity D1	0.5 kA 10/350 μs
Surge current-carrying capacity C3	50 A 10/1000 μs	Pulse-reset capacity	≤ 170 ms
Signal transmission properties (-3 dB)	270 Mhz	Lightning test current, limp (10/350 μs) Wire-PE	0.5 kA
Overload - failure mode	Modus 2	Rated load current I _L	500 mA
Protection level UP for C1 with 500V/250A (wire-wire)	62 V	Discharge current I _n (8/20μs) wire-wire	2.5 kA
Discharge current I _n (8/20μs) wire-PE	2.5 kA	Discharge current I _{max} (8/20μs) wire-PE	5 kA
Discharge current I _{max} (8/20μs) wire-wire	5 kA	Protection level UP for C3 with 1kV/μs (wire-wire)	55 V
Protection level UP for D1 with 0.5kA (wire-wire)	94 V	Protection level UP for C3 with 1kV/μs (wire-PE)	572 V
Protection level UP for C2 with 10kV/5kA (wire-wire)	108 V	Surge current-carrying capacity C2	2.5 kA 8/20 μs 5 kV 1.2/50 μs
Protection level UP for C1 with 500V/250A (wire-PE)	456 V	Protection level UP for C2 with 10kV/5kA (wire-PE)	960 V

Further details of approvals

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

Stripping length	10 mm	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	AC/DC
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General data

Number of poles	1	Protection degree	IP20
Colour	black		

Ratings IECEx/ATEX/cUL

cUL certificate	cUL Certificate - pdf/ VSSC.PDF (application/ pdf)
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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.
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Classifications

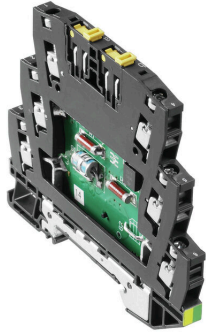
ETIM 8.0	EC000943	ETIM 9.0	EC000943
ETIM 10.0	EC000943	ECLASS 14.0	27-17-15-01
ECLASS 15.0	27-17-15-01		

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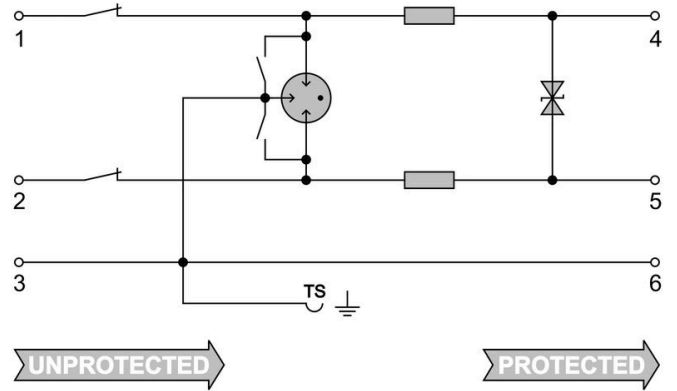
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Drawings



Similar to illustration



Circuit diagram

