

VSSC
VSSC6 TRCL24VAC/DC0.5A**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

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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

Discharge current $I_{\max}$ (8/20 μ s) wire-PE

5 kA

Discharge current I_n (8/20 μ s) wire-PE

2.5 kA

Discharge current, max. (8/20 μ s)

10 kA

Insertion loss

250 MHz

Lightning test current, I_{imp} (10/350 μ s)

Wire-PE

0.5 kA

Max. continuous voltage, U_c (DC)

42 V

Protection level U_p (typ.)

900 V

Protection level U_p for C1 with
500V/250A (wire-wire)

62 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-wire)

55 V

Protection level on output side Wire-wire
1 kV/ μ s, typically

70 V

Pulse-reset capacity

≤ 170 ms

Rated voltage (AC)

24 V

Requirements category acc. to IEC
61643-21

C2, C3, D1

Standards

IEC 61643-21, HART-compatible

Surge current-carrying capacity C3

50 A 10/1000 μ s

Voltage type

AC/DC

Discharge current $I_{\max}$ (8/20 μ s) wire-
wire

5 kA

Discharge current I_n (8/20 μ s) wire-wire

2.5 kA

Fuse

0.5 A

Lightning test current I_{imp} (10/350 μ s)

0.5 kA

Max. continuous voltage, U_c (AC)

30 V

Overload - failure mode

Modus 2

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 C3 with 1kV/ μ s
(wire-PE)

572 V

Protection level U_p for D1 with 0.5kA
(wire-wire)

94 V

Protection level, U_p wire - wire

90 V

Rated current I_N

500 mA

Rated voltage (DC)

34 V

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 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, max.

0.8 Nm

Clamping range, max.

4 mm²

Wire cross-section, solid, max.

6 mm²

Conductor cross-section, flexible, AEH
(DIN 46228-1), max.

4 mm²

Connection cross-section, stranded,
max.

4 mm²

Tightening torque, min.

0.5 Nm

Clamping range, min.

0.5 mm²

Wire cross-section, solid, min.

0.5 mm²

Conductor cross-section, flexible, AEH
(DIN 46228-1), min.

0.5 mm²

Connection cross-section, stranded, min.

0.5 mm²

Ratings IECEx/ATEX/cUL

cUL certificate

cUL Certificate

Classifications

ETIM 3.0

EC000943

ETIM 5.0

EC000943

UNSPSC

30-21-19-21

eClass 6.2

27-13-08-05

eClass 8.1

27-13-08-11

eClass 9.1

27-13-08-07

ETIM 4.0

EC000941

ETIM 6.0

EC000943

eClass 5.1

27-13-08-01

eClass 7.1

27-13-08-09

eClass 9.0

27-13-08-07

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Technical data

Approvals

Approvals



ROHS Conform

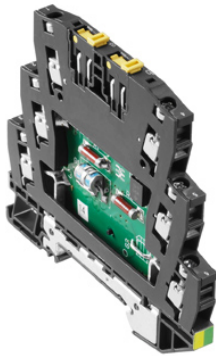
Downloads

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

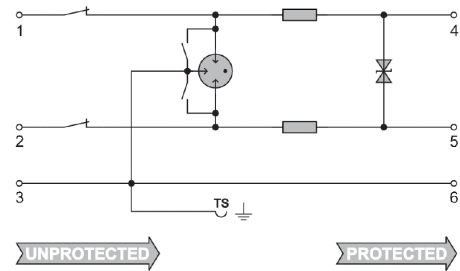
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Drawings



Similar to illustration



Circuit diagram

