

**VSSC6 TRCL60VAC/DC0.5A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

Similar to illustration

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, U <sub>p</sub> (L/N-PE) 780 V
Order No.	<a href="#">1064250000</a>
Type	VSSC6 TRCL60VAC/DC0.5A
GTIN (EAN)	4032248829613
Qty.	10 pc(s).

**VSSC6 TRCL60VAC/DC0.5A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Technical data****Dimensions and weights**

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.484 inch
Width	6.2 mm	Width (inches)	0.244 inch
Net weight	43.4 g		

**Temperatures**

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

**Probability of failure**

SIL in compliance with IEC 61508	2	MTTF	6,008 Jahre
SFF	89.74 %	λges	19
PFH in 1*10 <sup>-9</sup> per hour	1.95		

**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 <sub>I</sub>	500 mA
Input voltage, max. U <sub>i</sub>	106 V	Internal capacity, max. C <sub>I</sub>	1 nF
Internal inductance, max. L <sub>I</sub>	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
--------------------	---	------------------------	-----

## VSSC6 TRCL60VAC/DC0.5A

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Rated data IEC / EN

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

5 kA

Discharge current  $I_n$  (8/20 $\mu$ s) wire-PE

2.5 kA

Discharge current, max. (8/20  $\mu$ s)

10 kA

Insertion loss

250 MHz

Lightning test current,  $I_{\text{imp}}$  (10/350  $\mu$ s)

Wire-PE

0.5 kA

Max. continuous voltage,  $U_c$  (DC)

106 V

Overload - failure mode

Modus 2

Protection level on output side Wire-wire

1 kV/ $\mu$ s, typically

200 V

Pulse-reset capacity

 $\leq 20$  ms

Rated voltage (AC)

60 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  $\mu$ s

Voltage type

AC/DC

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

wire

5 kA

Discharge current  $I_n$  (8/20 $\mu$ s) wire-wire

2.5 kA

Fuse

0.5 A

Lightning test current  $I_{\text{imp}}$  (10/350  $\mu$ s)

0.5 kA

Max. continuous voltage,  $U_c$  (AC)

75 V

Number of poles

1

Protection level  $U_p$  (typ.)

780 V

Protection level,  $U_p$  wire - wire

260 V

Rated current  $I_N$ 

500 mA

Rated voltage (DC)

85 V

Signal transmission properties (-3 dB)

270 Mhz

Surge current-carrying capacity C2

2.5 kA 8/20  $\mu$ s 5 kV  
1.2/50  $\mu$ s

Surge current-carrying capacity D1

0.5 kA 10/350  $\mu$ s

Volume resistance

1.8  $\Omega$  10 %

## Further details of approvals

GOST certificate

GOST-Zertifikat

## Connection data

Stripping length

10 mm

Tightening torque, min.

0.5 Nm

Clamping range, min.

0.5 mm<sup>2</sup>

Wire cross-section, solid, min.

0.5 mm<sup>2</sup>

Conductor cross-section, flexible, AEH

(DIN 46228-1), min.

0.5 mm<sup>2</sup>

Connection cross-section, stranded, min.

0.5 mm<sup>2</sup>

Type of connection

Screw connection

Tightening torque, max.

0.8 Nm

Clamping range, max.

4 mm<sup>2</sup>

Wire cross-section, solid, max.

6 mm<sup>2</sup>

Conductor cross-section, flexible, AEH

(DIN 46228-1), max.

4 mm<sup>2</sup>

Connection cross-section, stranded,

max.

4 mm<sup>2</sup>

## Ratings IECEx/ATEX/cUL

cUL certificate

cUL Certificate

## Classifications

ETIM 6.0

EC000943

ETIM 8.0

EC000943

ECLASS 9.1

27-13-08-07

ECLASS 11.0

27-13-08-07

ETIM 7.0

EC000943

ECLASS 9.0

27-13-08-07

ECLASS 10.0

27-13-08-07

ECLASS 12.0

27-17-90-90

## VSSC6 TRCL60VAC/DC0.5A

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Tender specification sheets

Long specification	Short specification
<p>Surge protection in a one piece, 6.2 mm wide DIN rail module for a floating-ground signal circuit with 60 V UC, 2-wire technology. Each signal path can be opened using an isolator. A current loop with max. 0.6A can be protected here. When the terminal is fitted, a simultaneous electrically conducting contact is made between the mounting rail (earth) and the reference potential (ground) of the protection circuit in the terminal. Optical identification of the terminal based on the type of protected switching and the voltage level. The terminal can be labelled or marked.</p>	<p>Surge protection in a one piece, 6.2 mm wide DIN rail module for a floating-ground driven signal circuit with 2-wire technology and a common earth wire. Each signal path can be opened using an isolator. Version: 60V UC</p>

## Environmental Product Compliance

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

## 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.
---------------------	--

## Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UL)	E311081

## Downloads

Approval/Certificate/Document of Conformity	<a href="#">SIL Paper</a> <a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
Engineering Data	<a href="#">WSCAD</a>
User Documentation	<a href="#">Beipackzettel / Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

## VSSC6 TRCL60VAC/DC0.5A

**Weidmüller Interface GmbH & Co. KG**

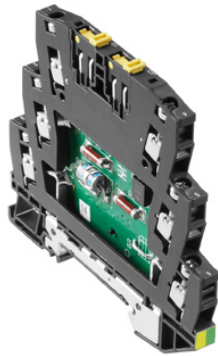
Klingenbergstraße 26

D-32758 Detmold

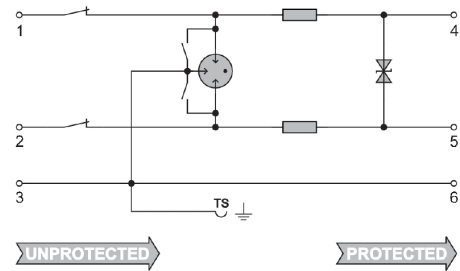
Germany

[www.weidmueller.com](http://www.weidmueller.com)

# Drawings



Similar to illustration



Circuit diagram

