

## VSSC6TRGDT110VAC/DC10KA

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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



Similar to illustration



Surge protection with individual components  
 With gas-discharge tubes in terminal design  
 Gas-discharge tubes / sparkover gaps (GDT) are designed with a terminal shape. They are approved for a maximum DC voltage, which is printed on the component. Any voltage greater than the amount specified is safely discharged within about 10-100µs. Gas arresters can be used for high-power applications.

### General ordering data

Version	Surge protection for instrumentation and control, Surge protection for measurement and control, $U_p(L/N-PE) \leq 1200 \text{ V}$
Order No.	<a href="#">1064890000</a>
Type	VSSC6TRGDT110VAC/DC10KA
GTIN (EAN)	4032248830145
Qty.	10 pc(s).

Creation date March 6, 2023 5:15:59 PM CET

Catalogue status 18.02.2023 / We reserve the right to make technical changes.

**VSSC6TRGDT110VAC/DC10KA****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	43.6 g		

**Temperatures**

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

**Probability of failure**

SIL in compliance with IEC 61508	3	MTTF	11,416 Jahre
SFF	100 %	λges	10
PFH in 1*10 <sup>-9</sup> per hour	0		

**Rated data UL**

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>	12 A
Input voltage, max. U <sub>i</sub>	195 V	Internal capacity, max. C <sub>I</sub>	0 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
--------------------	---	------------------------	-----

## VSSC6TRGDT110VAC/DC10KA

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

### Rated data IEC / EN

Capacitance	4.2 nF	Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE	10 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	2.5 kA	Discharge current, max. (8/20 $\mu$ s)	20 kA
Lightning test current $I_{imp}$ (10/350 $\mu$ s)	1 kA	Lightning test current, $I_{imp}$ (10/350 $\mu$ s)	1 kA
Max. continuous voltage, $U_c$ (AC)	138 V	Wire-PE	1 kA
Number of poles	1	Max. continuous voltage, $U_c$ (DC)	195 V
Protection level $U_p$ (typ.)	$\leq 1200$ V	Overload - failure mode	Modus 2
Rated voltage (AC)	110 V	Rated current $I_N$	12 A
Requirements category acc. to IEC 61643-21	C2, C3, D1	Rated voltage (DC)	156 V
Surge current-carrying capacity C2	2.5 kA 8/20 $\mu$ s 5 kV 1.2/50 $\mu$ s	Standards	IEC 61643-21
Surge current-carrying capacity D1	1 kA 10/350 $\mu$ s	Surge current-carrying capacity C3	50 A 10/1000 $\mu$ s
Volume resistance	$<0.1 \Omega$	Voltage type	AC/DC

### Further details of approvals

GOST certificate GOST-Zertifikat

### 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 <sup>2</sup>	Clamping range, max.	4 mm <sup>2</sup>
Wire cross-section, solid, min.	0.5 mm <sup>2</sup>	Wire cross-section, solid, max.	6 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	4 mm <sup>2</sup>
Connection cross-section, stranded, min.	0.5 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 7.0	EC000943
ETIM 8.0	EC000943	ECLASS 9.0	27-13-08-07
ECLASS 9.1	27-13-08-07	ECLASS 10.0	27-13-08-07
ECLASS 11.0	27-13-08-07	ECLASS 12.0	27-17-90-90

**VSSC6TRGDT110VAC/DC10KA****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Technical data****Tender specification sheets**

Long specification	Feed-through terminal, 12.4mm wide with sparkover gap between the two signal lines and the mounting rail potential, TS 35 contact base. Each signal path can be opened using an isolator. A signal with max. 12A 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.	Short specification
		Feed-through terminal with sparkover gaps (GDT) between two signal lines and mounting rail potential. Each signal path can be opened using an isolator. TS 35 contact base. Version: 110 V UC 10kA

**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
------	---------

**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	

Creation date March 6, 2023 5:15:59 PM CET

Catalogue status 18.02.2023 / We reserve the right to make technical changes.

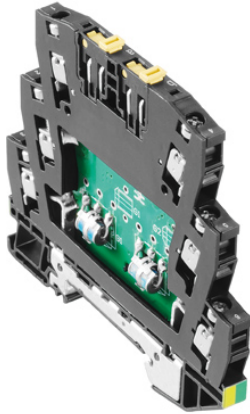
**Data sheet**

**VSSC6TRGDT110VAC/DC10KA**

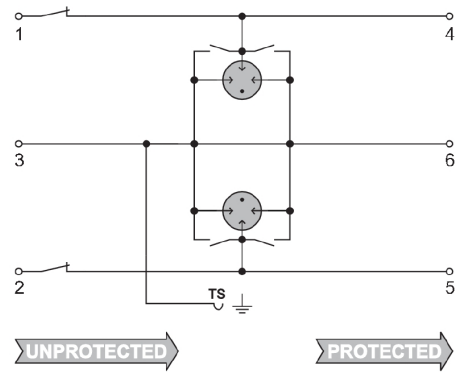
**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

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

**Drawings**



Similar to illustration



Circuit diagram

