

**VSSC6 GDT 240VAC/DC20KA****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

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, $U_P(L/N-PE) \leq 1900\text{ V}$
Order No.	<a href="#">1064720000</a>
Type	VSSC6 GDT 240VAC/DC20KA
GTIN (EAN)	4032248830008
Qty.	5 pc(s).

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## Technical data

## Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.484 inch
Width	12.4 mm	Width (inches)	0.488 inch
Net weight	58.8 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	3	MTTF	11,416 a
SFF	100 %	$\lambda_{ges}$	10
PFH in $1 \cdot 10^{-9}$ per hour	0		

## CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input current, max. $I_I$	12 A
Input voltage, max. $U_i$	407 V	Internal capacity, max. $C_I$	0 nF
Internal inductance, max. $L_I$	0 $\mu$ H		

## General data

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

## Insulation coordination acc. to EN 50178

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

Capacitance	2.4 nF	Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE	20 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	5 kA	Discharge current, max. (8/20 $\mu$ s)	20 kA
Lightning test current $I_{imp}$ (10/350 $\mu$ s)	2.5 kA	Lightning test current, $I_{imp}$ (10/350 $\mu$ s)	
Max. continuous voltage, $U_c$ (AC)	288 V	Wire-PE	1 kA
Number of poles	1	Max. continuous voltage, $U_c$ (DC)	407 V
Protection level $U_p$ (typ.)	$\leq 1900$ V	Overload - failure mode	Modus 2
Rated voltage (AC)	240 V	Rated current $I_N$	12 A
Requirements category acc. to IEC 61643-21	C2, C3, D1	Rated voltage (DC)	339 V
Surge current-carrying capacity C2	5 kA 8/20 $\mu$ s	Standards	IEC 61643-21
Surge current-carrying capacity D1	2.5 kA 10/350 $\mu$ s	Surge current-carrying capacity C3	100 A 10/1000 $\mu$ s
Volume resistance	<0.1 $\Omega$	Voltage type	AC/DC

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**Technical data****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	ETIM 9.0	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	ECLASS 13.0	27-17-90-90

**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. 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 the mounting rail potential, TS 35 contact base. Version: 240 V UC 20kA

**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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## Technical data

### 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>
User Documentation	<a href="#">Beipackzettel / Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

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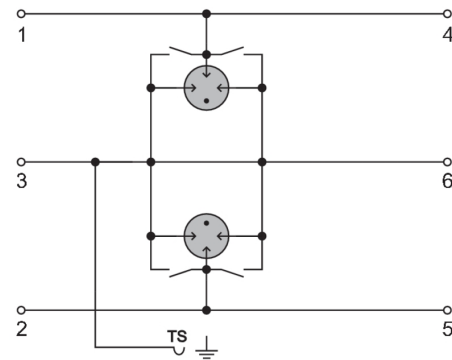
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Circuit diagram

