

## VSSC6 GDT 110VAC/DC20KA

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

www.weidmueller.com



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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, $U_p(L/N-PE) < 1000\text{ V}$
Order No.	<a href="#">1064700000</a>
Type	VSSC6 GDT 110VAC/DC20KA
GTIN (EAN)	4032248829989
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	52.8 g		

### Temperatures

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

### Probability of failure

SIL PAPER	SIL Paper	SIL in compliance with IEC 61508	3
MTTF	11,416 Jahre	SFF	100 %
$\lambda_{ges}$	10	PFH in $1 \cdot 10^{-9}$ per hour	0

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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### CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input current, max. $I_i$	12 A
Input voltage, max. $U_i$	195 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 measurement and control		

### Insulation coordination acc. to EN 50178

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

Capacitance	2.5 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	Lightning test current $I_{\text{imp}}$ (10/350 $\mu$ s)	2.5 kA
Lightning test current, $I_{\text{imp}}$ (10/350 $\mu$ s)		Max. continuous voltage, $U_c$ (AC)	
Wire-PE	1 kA		138 V
Max. continuous voltage, $U_c$ (DC)	195 V	Number of poles	1
Overload - failure mode	Modus 2	Protection level $U_p$ (typ.)	< 1000 V
Rated current $I_N$	12 A	Rated voltage (AC)	110 V
Rated voltage (DC)		Requirements category acc. to IEC 61643-21	C2, C3, D1
Standards	IEC 61643-21	Surge current-carrying capacity C2	5 kA 8/20 $\mu$ s
Surge current-carrying capacity C3	100 A 10/1000 $\mu$ s	Surge current-carrying capacity D1	2.5 kA 10/350 $\mu$ s
Voltage type	AC/DC	Volume resistance	<0,1 $\Omega$

### Further details of approvals

GOST certificate	GOST-Zertifikat
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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 <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.		Connection cross-section, stranded, max.	4 mm <sup>2</sup>
	0.5 mm <sup>2</sup>		

### Ratings IECEx/ATEX/cUL

cUL certificate	cUL Certificate
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### 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

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### Tender specification sheets

Long specification	Short specification
<p>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.</p>	<p>Feed-through terminal with sparkover gaps (GDT) between two signal lines and the mounting rail potential, TS 35 contact base, Version: 110 V UC 20kA</p>

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

**Data sheet**

**VSSC6 GDT 110VAC/DC20KA**

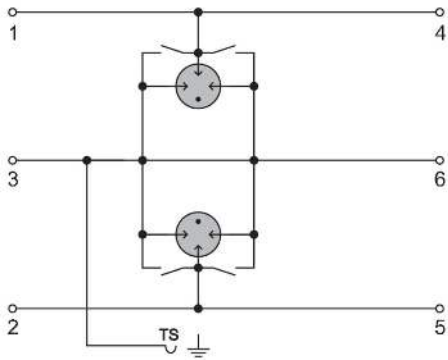
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**Drawings**



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Circuit diagram

