

VSSC6TRGDT24VAC/DC10KA**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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, $U_P(L/N-PE) < 1000\text{ V}$
Order No.	1064870000
Type	VSSC6TRGDT24VAC/DC10KA
GTIN (EAN)	4032248830121
Qty.	10 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	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
Humidity	5...96 %		

Probability of failure

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

Rated data UL

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	12 A
Input voltage, max. U_i	42 V	Internal capacity, max. C_i	0 nF
Internal inductance, max. L_i	0 μ H		

General data

Number of poles	1	Protection degree	IP20
Colour	black		

Insulation coordination acc. to EN 50178

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

Capacitance	1.5 nF	Discharge current I_{max} (8/20 μ s) wire-PE	10 kA
Discharge current I_n (8/20 μ s) wire-PE	2.5 kA	Discharge current, max. (8/20 μ s)	20 kA
Lightning test current I_{imp} (10/350 μ s)	1 kA	Lightning test current, I_{imp} (10/350 μ s) Wire-PE	1 kA
Max. continuous voltage, U_c (AC)	30 V	Max. continuous voltage, U_c (DC)	42 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)	24 V	Rated voltage (DC)	34 V
Requirements category acc. to IEC 61643-21	C2, C3, D1	Standards	IEC 61643-21
Surge current-carrying capacity C2	2.5 kA 8/20 μ s 5 kV 1.2/50 μ s	Surge current-carrying capacity C3	50 A 10/1000 μ s
Surge current-carrying capacity D1	1 kA 10/350 μ s	Voltage type	AC/DC
Volume resistance	<0.1 Ω		

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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 ²	Clamping range, max.	4 mm ²
Wire cross-section, solid, min.	0.5 mm ²	Wire cross-section, solid, max.	6 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	4 mm ²
Connection cross-section, stranded, min.	0.5 mm ²	Connection cross-section, stranded, max.	4 mm ²

Electrical data

Voltage type

AC/DC

Ratings IECEx/ATEX/cUL

cUL certificate

cUL Certificate

Classifications

ETIM 7.0	EC000943	ETIM 8.0	EC000943
ETIM 9.0	EC000943	ETIM 10.0	EC000943
ECLASS 12.0	27-17-15-01	ECLASS 13.0	27-17-15-01
ECLASS 14.0	27-17-15-01	ECLASS 15.0	27-17-15-01

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: 24 V UC 10kA

Environmental Product Compliance

RoHS Compliance Status

Compliant without exemption

REACH SVHC

No SVHC above 0.1 wt%

Creation date June 11, 2025 10:46:13 PM CEST

Catalogue status 07.06.2025 / We reserve the right to make technical changes.

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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



Approvals MAMID

https://mdcop.weidmueller.com/mediadelivery/rendition/900_319222/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319227/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319238/-T1z1mm-S800/

ROHS

Conform

Downloads

Approval/Certificate/Document of Conformity

[SIL Paper](#)[EU Konformitätserklärung / EU Declaration of Conformity](#)

Engineering Data

[CAD data – STEP](#)

User Documentation

[Beipackzettel / Instruction sheet](#)

Catalogues

[Catalogues in PDF-format](#)

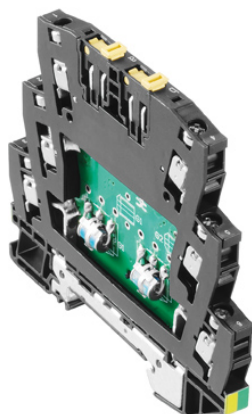
Brochures

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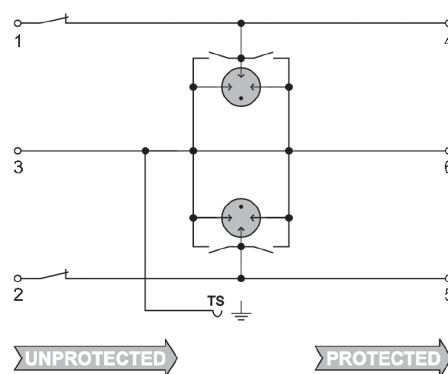
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Circuit diagram

