

**VSSC6TRGDT24VAC/DC10KA****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, $U_P(L/N-PE) < 1000\text{ V}$
Order No.	<a href="#">1064870000</a>
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
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		

## 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 $\mu$ H		

## 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, connec- tions 1, 2, 4, 5
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	1.5 nF	Discharge current $I_{\max}$ (8/20µs) wire-PE	10 kA
Discharge current $I_n$ (8/20µs) wire-PE	2.5 kA	Discharge current, max. (8/20 µs)	20 kA
Lightning test current $I_{\text{imp}}$ (10/350 µs)	1 kA	Lightning test current, $I_{\text{imp}}$ (10/350 µs)	1 kA
Max. continuous voltage, $U_c$ (AC)	30 V	Wire-PE	1 kA
Number of poles	1	Max. continuous voltage, $U_c$ (DC)	42 V
Protection level $U_p$ (typ.)	< 1000 V	Overload - failure mode	Modus 2
Rated voltage (AC)	24 V	Rated current $I_N$	12 A
Requirements category acc. to IEC 61643-21	C2, C3, D1	Rated voltage (DC)	34 V
Surge current-carrying capacity C2	2.5 kA 8/20 µs 5 kV 1.2/50 µs	Standards	IEC 61643-21
Surge current-carrying capacity D1	1 kA 10/350 µs	Surge current-carrying capacity C3	50 A 10/1000 µs
Volume resistance	<0.1 Ω	Voltage type	AC/DC

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

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## 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: 24 V UC 10kA

## Environmental Product Compliance

REACH SVHC

/

## 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

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

Engineering Data

[CAD data – STEP](#)

User Documentation

[Beipackzettel / Instruction sheet](#)

Catalogues

[Catalogues in PDF-format](#)

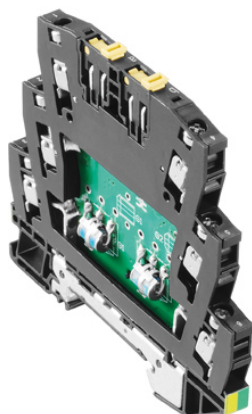
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**VSSC6TRGDT24VAC/DC10KA**

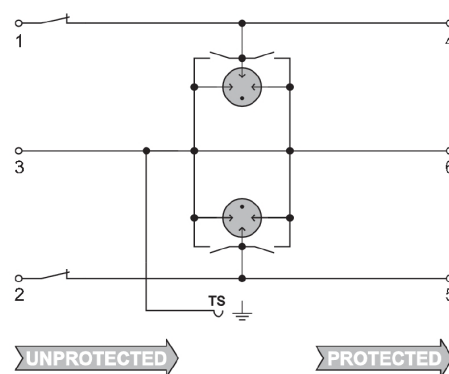
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Drawings



Similar to illustration



Circuit diagram



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## Accessories

## Blank



The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.

Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

## General ordering data

Type	DEK 5/5 MC NE WS	Version
Order No.	<a href="#">1609801044</a>	Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4008190397111	Weidmueller, white
Qty.	1,000 pc(s).	

## Accessories (end plates)



End plates (AP) for the VSSC product series in light blue and black

## General ordering data

Type	AP VSSC6	Version
Order No.	<a href="#">1063110000</a>	VSSC, End plate
GTIN (EAN)	4032248947553	
Qty.	50 pc(s).	

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Test plugs**

Test adapters and test plugs are used for the electrical connection between terminal blocks and the test equipment. In this way, an electrical contact can be established in the wired state and measurements can be done easily.

**General ordering data**

Type	PS 2.3 RT	Version
Order No.	<a href="#">0180400000</a>	Test adapter (terminal), 230 V, 20 mA
GTIN (EAN)	4008190060121	
Qty.	20 pc(s).	

**SnapMark**

SnapMark - this tag carrier has been developed specifically for the I-series double-level terminal IDK 1.5N. The flexible pivot mechanism allows cross-connections to be easily installed or removed. It can hold four DEK 5 labelling tags or two WS 10/5 Middle connector markers.

**General ordering data**

Type	SNAPMARK I	Version
Order No.	<a href="#">1805880000</a>	Group markers, Terminal marker, 23 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4032248273614	Weidmueller, white
Qty.	50 pc(s).	