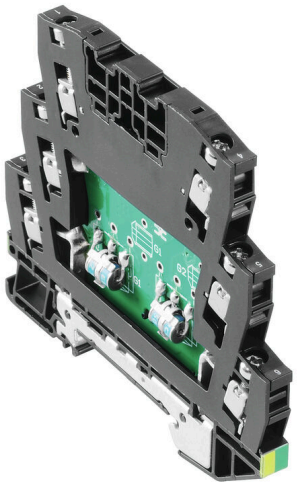
Data sheet

VSSC6 GDT 24VAC/DC 10KA

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

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
Order No.	1064640000
Type	VSSC6 GDT 24VAC/DC 10KA
GTIN (EAN)	4032248829958
Qty.	10 items

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Technical data

Approvals

Approvals	CSAEX
ROHS	Conform

Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.4842 inch
Width	6.2 mm	Width (inches)	0.2441 inch
Net weight	44.2 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	11416 a
SFF	100 %	λges	10
PFH in 1*10-9 per hour	0		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

CSA protection data

Gas group D	IIA	Gas groups A, B	IIC
Input-current, max. II	12 A	Gas group C	IIB
Internal inductance, max. LI	0 µH	Internal capacity, max. CI	0 nF
Input voltage, max. Ui	42 V		

General data

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

Insulation coordination acc. to EN 50178

Surge voltage category	III	Pollution severity	2

Rated data IEC / EN

Number of poles	1	Rated voltage (AC)	24 V
Rated voltage (DC)	34 V	Rated current IN	12 A

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Voltage type	AC/DC	Volume resistance	<0.1 Ω
Capacitance	1.5 nF	Standards	IEC 61643-21
Lightning test current Iimp (10/350 µs)	1 kA	Discharge current, max. (8/20 µs)	20 kA
Requirements category acc. to IEC 61643-21	C2, C3, D1	Max. continuous voltage, Uc (AC)	30 V
Max. continuous voltage, Uc (DC)	42 V	Surge current-carrying capacity D1	1 kA 10/350 µs
Surge current-carrying capacity C3	50 A 10/1000 µs	Lightning test current, Iimp (10/350 µs) Wire-PE	1 kA
Overload - failure mode	Modus 2	Rated load current IL	12 A
Discharge current In (8/20µs) wire-PE	2.5 kA	Discharge current Imax (8/20µs) wire-PE	10 kA
Surge current-carrying capacity C2	2.5 kA 8/20 µs 5 kV 1.2/50 µs		

Further details of approvals

GOST certificate	GOST-Zertifikat - PDF/7950_n1-n4.pdf (application/pdf)

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 mm²	Clamping range, max.	4 mm²
Wire cross-section, solid, min.	0.5 mm²	Wire cross-section, solid, max.	6 mm²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	4 mm²
Connection cross-section, stranded, min.	0.5 mm²	Connection cross-section, stranded, max.	4 mm²

Electrical data

Voltage type	AC/DC

General data

Number of poles	1	Protection degree	IP20
Colour	black		

Ratings IECEx/ATEX/cUL

cUL certificate	cUL Certificate - pdf/VSSC.PDF (application/pdf)

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.

Classifications

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

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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.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: 24 V UC 10 kA

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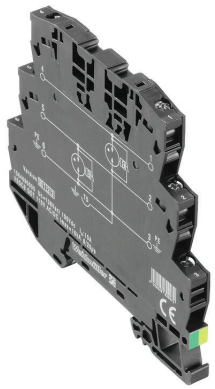
Drawings



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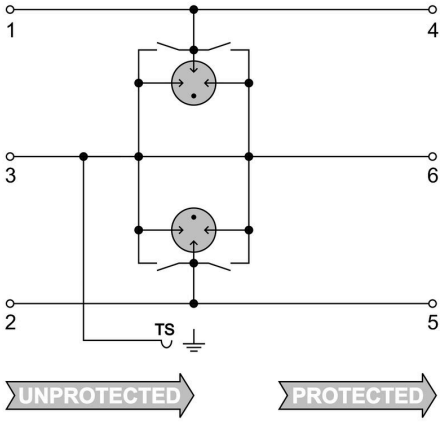

Circuit diagram

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Accessories

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.	1063110000	VSSC, End plate
GTIN (EAN)	4032248947553	
Qty.	50 ST	

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.

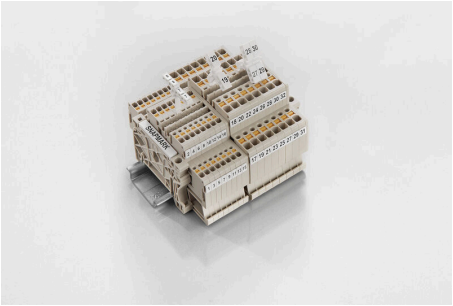
- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

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.	1609801044	Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4008190397111	Weidmueller, white
Qty.	1000 ST	

SnapMark



SnapMark - this tag carrier has been developed especifically 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.

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Accessories

General ordering data

Type	SNAPMARK I	Version
Order No.	1805880000	Group markers, Terminal marker, 23 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4032248273614	Weidmueller, white
Qty.	50 ST	