

**VSSC6 RS485****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Data surge protection**

- for RS 422 and RS 485 signal
- suitable as transient surge protection for fast data signals

**General ordering data**

Version	Surge protection for instrumentation and control, Surge protection for measurement and control, $U_P(L/N-PE) \leq 100 \text{ V}$
Order No.	<a href="#">1064980000</a>
Type	VSSC6 RS485
GTIN (EAN)	4032248830220
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	42 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	1,903 a
SFF	94.58 %	$\lambda_{ges}$	60
PFH in $1 \cdot 10^{-9}$ per hour	3.25		

## Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL Zertifikat
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## CSA protection data

Input current, max. $I_i$	500 mA	Internal capacity, max. $C_i$	2 nF
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## 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

Discharge current $I_{max}$ (8/20 $\mu$ s) wire-PE	10 kA	Discharge current $I_{max}$ (8/20 $\mu$ s) wire-wire	10 kA
Discharge current $I_n$ (8/20 $\mu$ s) wire-PE	2.5 kA	Discharge current $I_n$ (8/20 $\mu$ s) wire-wire	2.5 kA
Discharge current, max. (8/20 $\mu$ s)	20 kA	Insertion loss	113.7 MHz
Lightning test current $I_{imp}$ (10/350 $\mu$ s)	0.5 kA	Lightning test current, $I_{imp}$ (10/350 $\mu$ s) Wire-PE	0.5 kA
Max. continuous voltage, $U_c$ (DC)	15 V	Number of poles	1
Overload - failure mode	Modus 2	Protection level $U_p$ (typ.)	$\leq 100$ V
Pulse-reset capacity	$\leq 15$ ms	Rated current $I_N$	500 mA
Rated voltage (DC)	12 V	Requirements category acc. to IEC 61643-21	C2, C3, D1
Signal transmission properties (-3 dB)	113.6 MHz	Standards	IEC 61643-21
Surge current-carrying capacity C2	2.5 kA 8/20 $\mu$ s 5 kV 1.2/50 $\mu$ s	Surge current-carrying capacity C3	10 A 10/1000 $\mu$ s
Surge current-carrying capacity D1	0.5 kA 10/350 $\mu$ s	Voltage type	AC
Volume resistance	1.8 $\Omega$ 10 %		

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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>

## Electrical data

Voltage type

AC

## 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
ECLASS 14.0	27-17-90-90		

## Tender specification sheets

Long specification

Surge protection in a one piece, 6.2 mm wide DIN rail module for a RS 422 / RS 485 signal circuit with 12 V DC, 2-wire technology. A RS 422 / RS 485 data signal with max. 0.6A 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

Surge protection in a one piece, 6.2 mm wide DIN rail module for a RS 422 / RS 485 signal circuit with 2-wire technology. Version: 12V DC

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## Technical data

## Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	71e97bb7-979f-4330-94c0-20c629bb05e3

## 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
UL File Number Search	UL Website
Certificate No. (UL)	E311081

## Downloads

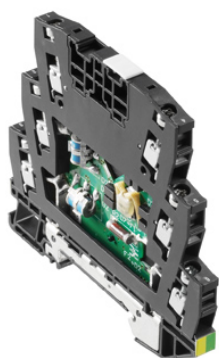
Approval/Certificate/Document of Conformity	<a href="#">SIL Paper</a> <a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
User Documentation	<a href="#">Beipackzettel / Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

## VSSC6 RS485

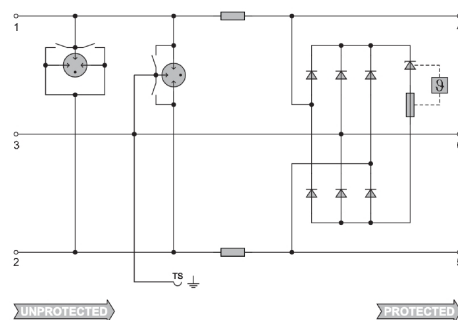
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## Drawings



Similar to illustration



Circuit diagram



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

**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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## 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).	