

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

Klingenbergstraße 26

D-32758 Detmold

Germany

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, UP(L/N-PE) ≤ 2 kV
Order No.	1065020000
Type	VSSC6 RS485 PA EX
GTIN (EAN)	403224883025 1
Qty.	1 ST

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Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.4842 inch
Width	12.4 mm	Width (inches)	0.4882 inch
Net weight	56 g		

Temperatures

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

Probability of failure

SIL in compliance with IEC 61508	3	MTTF	3936 a
SFF	93.97 %	λges	29
PFH in 1*10 ⁻⁹ per hour	1.75		

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

Protection Ex - Data

ATEX - dust labelling	II 1 D Ex ia IIIC T135 °C ... T85 °C Da	ATEX - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
IECEx - dust labelling	II 1 D Ex ia IIIC T135 °C ... T85 °C Da	IECEx - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
Input power, max. PI	0.75 W	Input voltage, max. Ui	35 V
Internal capacity, max. CI	1 nF	Internal inductance, max. LI	0 µH
Temperature class T4/135°C (-40°C ... +120 °C) li	300 mA	Temperature class T5/100°C (-40 °C ... +85 °C) li	300 mA
Temperature class T6/85 °C (-40 °C ... +70 °C) li	300 mA		

CSA protection data

Gas group D	IIA	Gas groups A, B	IIC
Input current, max. II	300 mA	Gas group C	IIB
Internal inductance, max. LI	0 µH	Internal capacity, max. CI	1 nF
Input voltage, max. Ui	35 V		

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Technical data

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	Light Blue
Protection degree	IP20	Rail	TS 35
Isolating function	No		

Insulation coordination acc. to EN 50178

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

Number of poles	1	Rated voltage (DC)	12 V
Rated current I _N	300 mA	Protection level UP (typ.)	≤ 2 kV
Voltage type	DC	Volume resistance	1.8 Ω 10 %
Standards	IEC61643-21:2009, DIN EN 60079-0:2009, DIN EN 60079-26:2007, DIN EN 61241-11:2006	Lightning test current I _{imp} (10/350 μs)	0.5 kA
Discharge current, max. (8/20 μs)	10 kA	Dielectric strength at FG against PE	≥ 500 V
Requirements category acc. to IEC 61643-21	C2, C3, D1	Insertion loss	250 MHz
Max. continuous voltage, U _c (DC)	35 V	Surge current-carrying capacity D1	0.5 kA 10/350 μs
Surge current-carrying capacity C3	10 A 10/1000 μs	Pulse-reset capacity	≤ 15 ms
Signal transmission properties (-3 dB)	113.6 MHz	Lightning test current, I _{imp} (10/350 μs) Wire-PE	0.5 kA
Overload - failure mode	Modus 2	Discharge current I _n (8/20 μs) wire-wire	2.5 kA
Discharge current I _n (8/20 μs) wire-PE	2.5 kA	Discharge current I _{max} (8/20 μs) wire-PE	5 kA
Discharge current I _{max} (8/20 μs) wire-wire	5 kA	Input voltage, max. U _i	35 V
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)
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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 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	DC
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Technical data

General data

Number of poles	1	Protection degree	IP20
Colour	Light Blue		

Ratings IECEx/ATEX/cUL

ATEX - dust labelling	II 1 D Ex ia IIC T135 °C ... T85 °C Da	ATEX - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
ATEX certificate	ATEX Certificate	IEC Ex certificate	IECEX Zertifikat
IECEx - dust labelling	II 1 D Ex ia IIC T135 °C ... T85 °C Da	IECEx - gas labelling	II 1 G Ex ia IIC T4... T6 Ga
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.
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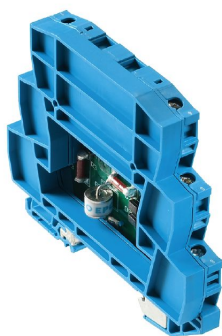
Classifications

ETIM 7.0	EC000943	ETIM 8.0	EC000943
ETIM 9.0	EC000943	ETIM 10.0	EC000943
ECLASS 12.0	27-17-15-02	ECLASS 13.0	27-17-15-02
ECLASS 14.0	27-17-15-02	ECLASS 15.0	27-17-15-02

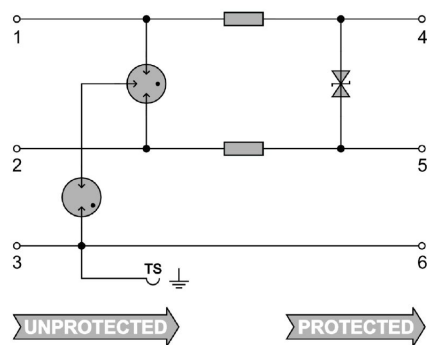
Tender specification sheets

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



Similar to illustration



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 LB	Version
Order No.	1067230000	VSSC, End plate
GTIN (EAN)	4032248999866	
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.

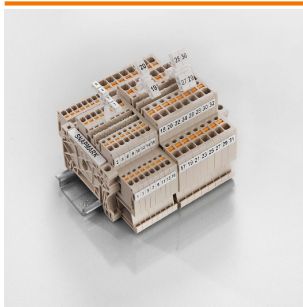
Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

- 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 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.

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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	