

VSPC RS485 2CH**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, 5 V, 5 V, 450 mA, IEC 61643-21
Order No.	8924670000
Type	VSPC RS485 2CH
GTIN (EAN)	4032248696314
Qty.	1 pc(s).

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Technical data**Dimensions and weights**

Depth	69 mm	Depth (inches)	2.717 inch
Height	90 mm	Height (inches)	3.543 inch
Net weight	27.5 g	Width	17.8 mm
Width (inches)	0.701 inch		

Temperatures

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

Probability of failure

SIL PAPER	SIL Paper	SIL in compliance with IEC 61508	3
MTTF	2,003 Years	SFF	92.54 %
λ_{ges}	57	PFH in $1 \cdot 10^{-9}$ per hour	4.25

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL 497b Certificate
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CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input voltage, max. U_i	6.4 V
Internal capacity, max. C_i	11 nF	Internal inductance, max. L_i	0 μ H

General data

Colour	orange	Design	Terminal, miscellaneous
Protection degree	IP20	Segment	Measurement - Monitoring - Setting
UL 94 flammability rating	V-0	Version	without warning function / function indicator

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
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Technical data

Rated data IEC / EN

Discharge current $I_{\max}$ (8/20 μ s) GND-PE	10 kA	Discharge current $I_{\max}$ (8/20 μ s) wire-PE	2 x 10 kA
Discharge current $I_{\max}$ (8/20 μ s) wire-wire	10 kA	Discharge current I_n (8/20 μ s) GND-PE	2.5 kA
Discharge current I_n (8/20 μ s) wire-PE	2.5 kA	Discharge current I_n (8/20 μ s) wire-wire	2.5 kA
Insertion loss	113.7 MHz	Lightning test current, I_{imp} (10/350 μ s) GND-PE	0.2 kA
Lightning test current, I_{imp} (10/350 μ s) Wire-PE	2 x 0.2 kA	Lightning test current, I_{imp} (10/350 μ s) wire-wire	0.2 kA
Max. continuous voltage, U_c (AC)	5 V	Max. continuous voltage, U_c (DC)	6.4 V
Number of poles	1	Overload - failure mode	Modus 2
Protection level U_p (typ.)	250 V	Protection level on output side Wire-PE 1kV/ μ s, typically	10 V
Protection level on output side Wire-wire 1 kV/ μ s, typically	10 V	Protection level on output side Wire-wire 8/20 μ s, typically	15 V
Protection level, U_p GND - PE	500 V	Protection level, U_p wire - PE	35 V
Protection level, U_p wire - wire	15 V	Pulse-reset capacity	≤ 20 ms
Rated current I_N	450 mA	Rated voltage (AC)	5 V
Rated voltage (DC)	5 V	Requirements category acc. to IEC 61643-21	C1, C2, C3, D1
Signal transmission properties (-3 dB)	113.6 MHz	Signalling contact	No
Standards	IEC 61643-21	Surge current-carrying capacity C1	< 1 kA 8/20 μ s
Surge current-carrying capacity C2	5 kA 8/20 μ s	Surge current-carrying capacity C3	100 A 10/1000 μ s
Surge current-carrying capacity D1	2.5 kA 10/350 μ s	Voltage type	AC/DC
Volume resistance	2.20 Ω		

Further details of approvals

GOST certificate GOST-Zertifikat

Connection data

Type of connection Pluggable in VSPC BASE

Ratings IECEx/ATEX/cUL

cUL certificate cUL Certificate

Classifications

ETIM 6.0	EC000943	ETIM 7.0	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

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Technical data

Tender specification sheets

Long specification	Short specification
Surge protection plug for use in connection with the base element VSPC BASE 2CL for two floating-ground driven signal cables and ground, e.g. for bus systems. Two-stage protection circuit consisting of coarse protection, decoupling resistors and fine protection between the signal wires and additional coarse common mode voltage protection to earth. Mechanical identification of the plug to the base element according to the switching type and rated voltage. Protected plug with coding pin and counter-profile for the base element. It is possible to mark the plug.	Surge protection plug for base element VSPC BASE 2CL, transverse voltage coarse and fine protection for two floating-ground powered IT signal cables, coarse common mode voltage protection to earth. Version: 5V DC

Approvals

Approvals



ROHS	Conform
UL File Number Search	E311081

Downloads

Approval/Certificate/Document of Conformity	SIL Paper CE PAPER Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Instruction sheet

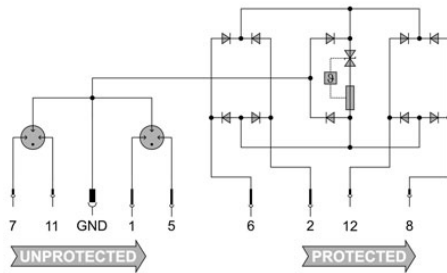
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Drawings

Electric symbol



Circuit diagram

Cate- gory	Testing pulse	Surge voltage	Surge current	Pulse Type
C1	Quick- rising edge	0.5 - 2 kV with 1.2/50 µs	0.25 - 1 kA mit 8/20 µs	300 Surge voltage arrester
C2	Quick- rising edge	2 - 10 kV with 1.2/50 µs	1 - 5 kA mit 8/20 µs	10 Surge voltage arrester
C3	Quick- rising edge	≥ 1 kV with 1 kV/µs	10 - 100 A mit 10/10000 µs	300 Surge voltage arrester
D1	High power	≥ 1 kV	0.5 - 2.5 kA mit 10/350 µs	2 Arrester for lightning current and surge voltages

Discharge capacity

