

## VSPC 4SL 24VAC R

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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



Binary signal (SL – Symmetrical Load) protection includes the following signals:

- Switching signals with and without a common reference potential e.g. 5 V – 24V – 60 V
- Two-conductor systems usually involve a common reference potential of binary sensors, actuators and indicators such as limit switches, buttons, position sensors, photoelectric barriers, contactors, solenoid valves, indicator lamps, etc.
- Pluggable arrester, for interruption-free and impedance-neutral plug-in and pull-out
- Can be tested with the V-TEST testing device
- Version with floating-earth PE connection used to avoid interference currents resulting from differences in potential
- For use in compliance with the IEC 62305 and IEC 61643-22 installation standards (D1, C1, C2 and C3)
- Integrated PE foot safely discharges up to 20 kA (8/20  $\mu$ s) and 2.5 kA (10/350  $\mu$ s) to the PE
- Colour coding of the voltage levels for fast identification on the panel
- Safety function through coding elements for different voltage levels

### General ordering data

Version	Surge protection for instrumentation and control, with warning function / function indicator
Order No.	<a href="#">8951600000</a>
Type	VSPC 4SL 24VAC R
GTIN (EAN)	4032248742844
Qty.	1 items

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**Technical data**

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	<a href="#">UL Website</a>
Certificate No. (UL)	E311081

**Dimensions and weights**

Depth	69 mm	Depth (inches)	2.7165 inch
Height	98 mm	Height (inches)	3.8583 inch
Width	17.8 mm	Width (inches)	0.7008 inch
Net weight	50 g		

**Temperatures**

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

**Probability of failure**

SIL in compliance with IEC 61508	2	MTTF	2665 a
SFF	86.02 %	λges	43
PFH in 1*10 <sup>-9</sup> per hour	10.7		

**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

**Rated data UL**

Certificate No. (UL)	E311081	UL certificate	UL 497b Certificate - PDF/ E311081VOL1SEC2.pdf (application/pdf)
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**CSA protection data**

Gas group D	IIA	Gas groups A, B	IIC
Gas group C	IIB	Internal inductance, max. LI	0 µH
Internal capacity, max. CI	4 nF		

**General data**

Optical function display	green = OK; red = arrester is defective - replace	Segment	Measurement - Monitoring - Setting
Version	with warning function / function indicator	Colour	orange
Protection degree	IP20	protected binary signals	4

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## Technical data

## Insulation coordination acc. to EN 50178

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

Number of poles	2	Rated voltage (AC)	24 V
Rated current I <sub>N</sub>	300 mA	Protection level on output side Wire-wire	110 V 1 kV/μs, typically
Protection level on output side Wire-PE	60 V 1 kV/μs, typically	Protection level on output side Wire-wire	80 V 8/20 μs, typically
Protection level, UP wire - wire	110 V	Protection level, UP wire - PE	60 V
Voltage type	AC/DC	Fuse protection	0.5 A
Volume resistance	4.7 Ω	Standards	IEC 61643-21
Requirements category acc. to IEC 61643-21	C1, C2, C3, D1	Lightning test current, I <sub>imp</sub> (10/350 μs) wire-wire	2.5 kA
Surge current-carrying capacity D1	2.5 kA 10/350 μs	Surge current-carrying capacity C1	<1 kA 8/20 μs
Surge current-carrying capacity C3	100 A 10/1000 μs	Lightning test current, I <sub>imp</sub> (10/350 μs) GND-PE	2.5 kA
Pulse-reset capacity	≤ 40 ms	Signal transmission properties (-3 dB)	2.7 MHz
Lightning test current, I <sub>imp</sub> (10/350 μs) Wire-PE	2.5 kA	Overload - failure mode	Modus 2
Discharge current I <sub>max</sub> (8/20 μs) GND-PE	10 kA	Rated load current I <sub>L</sub>	300 mA
Discharge current I <sub>n</sub> (8/20 μs) wire-wire	2.5 kA	Discharge current I <sub>n</sub> (8/20 μs) wire-PE	2.5 kA
Discharge current I <sub>max</sub> (8/20 μs) wire-PE	10 kA	Discharge current I <sub>max</sub> (8/20 μs) wire-wire	10 kA
Discharge current I <sub>n</sub> (8/20 μs) GND-PE	2.5 kA	Surge current-carrying capacity C2	5 kA 8/20 μs

## Further details of approvals

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

Type of connection	Pluggable in VSPC BASE
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## Electrical data

Voltage type	AC/DC
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## General data

Number of poles	2	Protection degree	IP20
Colour	orange		

## Ratings IECEx/ATEX/cUL

cUL certificate	cUL Certificate - pdf/ VSPC.PDF (application/pdf)
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## Guarantee

Time interval	5 years
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**Technical data****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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Drawings

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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 mit 10/350 µs	0.5 - 2.5 kA 2	Arrester for lightning current and surge voltages

Discharge capacity



Komplettmodul