

VSPC 4SL 48VAC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

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 μ s) and 2.5 kA (10/350 μ 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, without warning function / function indicator, $U_p(L/N-PE) \leq 300$ V |
| Order No. | 8924360000 |
| Type | VSPC 4SL 48VAC |
| GTIN (EAN) | 4032248696000 |
| Qty. | 1 pc(s). |

VSPC 4SL 48VAC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

| | | | |
|------------|---------|-----------------|------------|
| Depth | 69 mm | Depth (inches) | 2.717 inch |
| Height | 90 mm | Height (inches) | 3.543 inch |
| Width | 17.8 mm | Width (inches) | 0.701 inch |
| Net weight | 48 g | | |

Temperatures

| | | | |
|-----------------------------|----------------|-----------------------------|----------------|
| Storage temperature | -40 °C...80 °C | Operating temperature | -40 °C...70 °C |
| Operating temperature, min. | -40 °C | Operating temperature, max. | 70 °C |
| Humidity | 5...96 % | | |

Probability of failure

| | | | |
|-----------|-------------|------------------------------------|--------|
| SIL PAPER | SIL Paper | SIL in compliance with IEC 61508 | 2 |
| MTTF | 2,665 Years | SFF | 79.3 % |
| λges | 43 | PFH in 1*10 ⁻⁹ per hour | 8.9 |

Rated data UL

| | | | |
|----------------------|---------|----------------|---------------------|
| Certificate No. (UL) | E311081 | UL certificate | UL 497b Certificate |
|----------------------|---------|----------------|---------------------|

CSA protection data

| | | | |
|--|------|--|------|
| Gas group C | IIB | Gas group D | IIA |
| Gas groups A, B | IIC | Input voltage, max. U _i | 85 V |
| Internal capacity, max. C _i | 4 nF | Internal inductance, max. L _i | 0 μH |

General data

| | | | |
|--------------------------|--|---------------------------|-------------------------|
| Colour | orange | Design | Terminal, miscellaneous |
| Optical function display | No | Protection degree | IP20 |
| Segment | Measurement - Monitoring - Setting | UL 94 flammability rating | V-0 |
| Version | without warning function / function indicator | protected binary signals | 4 |

Insulation coordination acc. to EN 50178

| | | | |
|--------------------|---|------------------------|-----|
| Pollution severity | 2 | Surge voltage category | III |
|--------------------|---|------------------------|-----|

VSPC 4SL 48VAC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

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 | 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 |
| Fuse | 0.5 A | Lightning test current, I_{imp} (10/350 μ s) GND-PE | 2.5 kA |
| Lightning test current, I_{imp} (10/350 μ s) Wire-PE | 2.5 kA | Lightning test current, I_{imp} (10/350 μ s) wire-wire | 2.5 kA |
| Max. continuous voltage, U_c (AC) | 60 V | Max. continuous voltage, U_c (DC) | 85 V |
| Number of poles | 2 | Overload - failure mode | Modus 2 |
| Protection level U_p (typ.) | ≤ 300 V | Protection level on output side Wire-PE 1kV/ μ s, typically | 85 V |
| Protection level on output side Wire-wire 1 kV/ μ s, typically | 210 V | Protection level on output side Wire-wire 8/20 μ s, typically | 80 V |
| Protection level, U_p GND - PE | 450 V | Protection level, U_p wire - PE | 80 V |
| Pulse-reset capacity | ≤ 60 ms | Rated current I_N | 250 mA |
| Rated voltage (AC) | 48 V | Rated voltage (DC) | 68 V |
| Requirements category acc. to IEC 61643-21 | C1, C2, C3, D1 | Signal transmission properties (-3 dB) | 8.7 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 | Volume resistance | 4.7 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 |
| ETIM 8.0 | 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 |

VSPC 4SL 48VAC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Tender specification sheets

| Long specification | | Short specification |
|--------------------|---|---|
| | <p>Surge protection plug for use in connection with the base element VSPC BASE 4SL for four wires with a common ground. Two-stage protection circuit in the plug consisting of coarse protection, decoupling resistors and fine protection between the signal wires and the signal ground/ground/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. Optical identification of the protected plug based on the type of protected switching and the voltage level. It is possible to mark the plug.</p> | <p>Surge protection plug for base element VSPC BASE 4SL R, coarse and fine common mode voltage protection for four wires with a common ground. Version: 48 V AC</p> |

Environmental Product Compliance

| | |
|------------|--------------------------------------|
| 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. |
|---------------------|--|

Approvals

Approvals



| | |
|-----------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate No. (UL) | E311081 |

Downloads

| | |
|---|--|
| Approval/Certificate/Document of Conformity | SIL Paper EU Konformitätserklärung / EU Declaration of Conformity |
| Engineering Data | CAD data – STEP |
| Engineering Data | WSCAD |
| User Documentation | Beipackzettel / Instruction sheet |
| Catalogues | Catalogues in PDF-format |
| Brochures | |

Creation date February 17, 2023 9:22:53 AM CET

Catalogue status 03.02.2023 / We reserve the right to make technical changes.

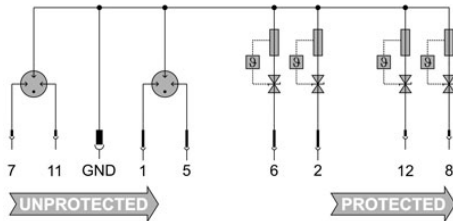
VSPC 4SL 48VAC

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

www.weidmueller.com

Drawings

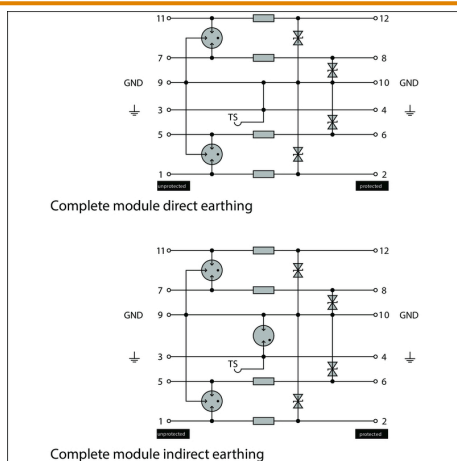
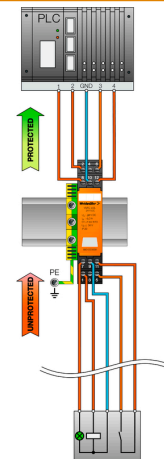
Electric symbol



Circuit diagram

| Cate- gory | Testing pulse | Surge voltage | Surge current | Pulse | Type |
|------------|-------------------|-------------------------|-------------------------------|-------|---|
| C1 | Quick-rising edge | 0.5 - 2 kV 1.2/50 µs | 0.25 - 1 kA 8/20 µs | 300 | Surge voltage arrester |
| C2 | Quick-rising edge | 2 - 10 kV 1.2/50 µs | 1 - 5 kA 8/20 µs | 10 | Surge voltage arrester |
| C3 | Quick-rising edge | ≥ 1 kV 1 kV/µs | 10 - 100 A 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



Komplettmodul