

VSPC 3/4WIRE 5VDC EX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

3 or 4-wire system protection includes the following signals:

- PT100, measuring bridges, DMS sensors, measuring bridges, ...
- Pluggable arrester, for interruption-free and impedance-neutral plug-in and pull-out
- Can be tested with V-TEST testing device
- Space-saving design for up to 4 binary signals
- Version with floating-earth PE connection used to avoid interference currents that result from differences in voltage potential
- For use in compliance with the IEC 62305 and IEC61643-22 (D1, C1, C2 and C3) installation standards
- Integrated PE foot safely discharges up to 20 kA (8/20 µs) and 2.5 kA (10/350 µs) to the PE
- Colour coding of the voltage levels for fast identification in the cabinet
- Safety function through coding elements for different voltage levels

General ordering data

Version	Surge protection for instrumentation and control, 3 V, 300 mA, IEC 61643-21, IEC 62305, DIN EN 60079-0:2009, DIN EN 60079-11:2007, DIN EN 60079-26:2007, DIN EN 61241-11:2006
Order No.	8953650000
Type	VSPC 3/4WIRE 5VDC EX
GTIN (EAN)	4032248745807
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	53 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	2,655 Years	SFF	95.33 %
λges	43	PFH in 1*10 ⁻⁹ per hour	7

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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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
Certificate No. (ATEX)	KEMA10ATEX0148X	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. P _i	3 W
Input voltage, max. U _i	6 V	Internal capacity, max. C _i	< 4 nF
Internal inductance, max. L _i	0 μH	Temperature class T4/135°C (-40°C ... +85°C) li	350 mA
Temperature class T5/100°C (-40 °C ... +75°C) li	250 mA	Temperature class T6/85 °C (-40 °C ... +60°C) li	250 mA

CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input voltage, max. U _i	6 V
Internal capacity, max. C _i	4 nF	Internal inductance, max. L _i	0 μH

General data

Colour	Light Blue	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		

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III
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Technical data

Rated data IEC / EN

Capacitance	2.3 pF	Dielectric strength at FG against PE	≥ 500 V
Discharge current $I_{\max}$ (8/20μs) GND-PE	10 kA	Discharge current $I_{\max}$ (8/20μs) wire-PE	10 kA
Discharge current $I_{\max}$ (8/20μs) wire-wire	10 kA	Discharge current I_n (8/20μs) GND-PE	2.5 kA
Discharge current I_n (8/20μs) wire-PE	2.5 kA	Discharge current I_n (8/20μs) wire-wire	2.5 kA
Input voltage, max. U_i	6 V	Lightning test current, I_{imp} (10/350 μs) GND-PE	2.5 kA
Lightning test current, I_{imp} (10/350 μs) Wire-PE	2.5 kA	Lightning test current, I_{imp} (10/350 μs) wire-wire	2.5 kA
Max. continuous voltage, U_c (DC)	6.4 V	Number of poles	2
Overload - failure mode	Modus 2	Protection level U_p (typ.)	< 800 V
Protection level on output side Wire-PE 1kV/μs, typically	250 V	Protection level on output side Wire-wire 1 kV/μs, typically	35 V
Protection level on output side Wire-wire 8/20 μs, typically	35 V	Protection level, U_p GND - PE	450 V
Protection level, U_p wire - PE	10 V	Protection level, U_p wire - wire	20 V
Pulse-reset capacity	≤ 20 ms	Rated current I_N	300 mA
Rated voltage (DC)	3 V	Requirements category acc. to IEC 61643-21	C1, C2, C3, D1
Signal transmission properties (-3 dB)	750 KHz	Signalling contact	No
Standards	IEC 61643-21, IEC 62305, DIN EN 60079-0:2009, DIN EN 60079-11:2007, DIN EN 60079-26:2007, DIN EN 61241-11:2006	Surge current-carrying capacity C1	< 1 kA 8/20 μs
Surge current-carrying capacity C2	5 kA 8/20 μs	Surge current-carrying capacity C3	100 A 10/1000 μs
Surge current-carrying capacity D1	2.5 kA 10/350 μs	Voltage type	DC
Volume resistance	0.20 Ω		

Further details of approvals

GOST certificate	GOST-Zertifikat
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Connection data

Type of connection	Pluggable in VSPC BASE
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Ratings IECEx/ATEX/cUL

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
ATEX certificate	ATEX Certificate	Certificate No. (ATEX)	KEMA10ATEX0148X
IEC Ex certificate	IECEX Zertifikat	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	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

Surge protection plug for use in connection with the base element VSPC BASE 2/4 CH FG for four floating-ground driven, intrinsically safe signal cables EX ia. Two-stage protection consisting of coarse and fine protection between all signal cables as well as coarse common mode voltage protection to signal 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.

Short specification

Surge protection plug for base element VSPC BASE 2/4 CH FG, transverse voltage coarse and fine protection for four floating-ground powered, intrinsically safe signal cables EX ia, coarse common mode voltage protection to earth. Version: 5 V DC

Approvals

Approvals



ROHS

Conform

Downloads

Approval/Certificate/Document of Conformity	KEMA 10 ATEX 0148X Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Instruction sheet

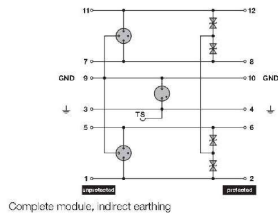
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Drawings

Electric symbol



Circuit diagram

