

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

Klingenbergstraße 26

D-32758 Detmold

Germany

Fon: +49 5231 14-0

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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

Type	VSPC 3/4WIRE 5VDC EX
Order No.	8953650000
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
GTIN (EAN)	4032248745807
Qty.	1 pc(s).

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Technical data
Dimensions and weights

Width	17.8 mm	Width (inches)	0.701 inch
Height	90 mm	Height (inches)	3.543 inch
Depth	69 mm	Depth (inches)	2.717 inch
Net weight	53 g		

Temperatures

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

Probability of failure

λ_{ges}	43	MTTF	2,655 Years
PFH in $1 \cdot 10^{-9}$ per hour	7	SFF	95.33 %
SIL in compliance with IEC 61508	3		

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 μ H	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 μ H

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**

Rated voltage (DC)	3 V
Max. continuous voltage, U_c (DC)	6.4 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
Lightning test current, I_{imp} (10/350 µs) Wire-PE	2.5 kA
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
Protection level on output side Wire-PE 1kV/µs, typically	250 V
Protection level on output side Wire-wire 8/20 µs, typically	35 V
Protection level, U_p wire - PE	10 V
Dielectric strength at FG against PE	≥ 500 V
Number of poles	2
Protection level, U_p wire - wire	20 V
Rated current I_N	300 mA
Signal transmission properties (-3 dB)	750 KHz
Surge current-carrying capacity C1	< 1 kA 8/20 µs
Surge current-carrying capacity C3	100 A 10/1000 µs
Volume resistance	0.20 Ω

Voltage type	DC
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
Lightning test current, I_{imp} (10/350 µs) GND-PE	2.5 kA
Lightning test current, I_{imp} (10/350 µs) wire-wire	2.5 kA
Protection level U_p (typ.)	< 800 V
Protection level on output side Wire-wire 1 kV/µs, typically	35 V
Protection level, U_p GND - PE	450 V
Capacitance	2.3 pF
Input voltage, max. U_i	6 V
Overload - failure mode	Modus 2
Pulse-reset capacity	≤ 20 ms
Requirements category acc. to IEC 61643-21	C1, C2, C3, D1
Signalling contact	No
Surge current-carrying capacity C2	5 kA 8/20 µs
Surge current-carrying capacity D1	2.5 kA 10/350 µs

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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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	UNSPSC	30-21-19-21

Approvals

Approvals



ROHS	Conform
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Technical data

Downloads

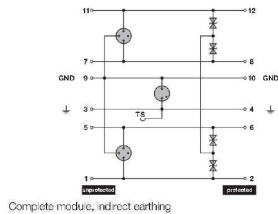
Approval/Certificate/Document of Conformity	KEMA 10 ATEX 0148X Declaration of Conformity Declaration of Conformity Declaration of Conformity
Brochure/Catalogue	CAT 4.4 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Instruction sheet

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Drawings

Electric symbol



Circuit diagram

