

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

Klingenbergstraße 16

D-32758 Detmold

Germany

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

Classifications

ETIM 3.0	EC000943	ETIM 4.0	EC000381
ETIM 5.0	EC000943	ETIM 6.0	EC000943
UNSPSC	30-21-19-21	eClass 5.1	27-13-08-01
eClass 6.2	27-13-08-02	eClass 7.1	27-13-08-09
eClass 8.1	27-13-08-11	eClass 9.0	27-13-08-07
eClass 9.1	27-13-08-07		

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Technical data

Approvals

Approvals



ROHS

Conform

Downloads

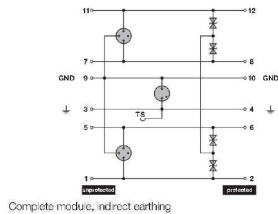
Approval/Certificate/Document of Conformity	Declaration of Conformity Declaration of Conformity Declaration of Conformity
Brochure/Catalogue	CAT 4.4 ELECTR 16/17 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Instruction sheet

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Drawings

Electric symbol



Circuit diagram

