

VSPC GDT 2CH 90V

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



- Pluggable arrester with ungrounded varistors (MOV) for use as protection circuit for coils
- For applications as surge protection, external wire links to GND must be connected at the VSPC BASE FG (e.g. connection 8-10 and 9-5)
- Pluggable arrester, with no-interrupt and impedance-neutral plug-in and pull-out
- Can be tested with the V-TEST testing device
- Integrated PE foot in the VSPC BASE, safely discharges up to 20 kA (8/20 μ s) and 2.5 kA (10/350 μ s) to PE

General ordering data

Version	Surge protection for instrumentation and control, without warning function / function indicator, $U_p(L/N-PE) < 1000$ V
Order No.	8924570000
Type	VSPC GDT 2CH 90V
GTIN (EAN)	4032248696215
Qty.	1 pc(s).

Creation date February 28, 2023 6:13:39 PM CET

Catalogue status 18.02.2023 / We reserve the right to make technical changes.

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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
Width	17.8 mm	Width (inches)	0.701 inch
Net weight	40 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 in compliance with IEC 61508	3	MTTF	10,378 Years
SFF	100 %	λges	11
PFH in 1*10 ⁻⁹ per hour	0		

Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL 497b Certificate
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CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input voltage, max. U _i	72 V
Internal capacity, max. C _i	0 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		

Insulation coordination acc. to EN 50178

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

Capacitance	9.37 pF	Discharge current I_{max} (8/20 μ s) GND-PE	10 kA
Discharge current I_{max} (8/20 μ s) wire-wire	2 x 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 x 2.5 kA
Fuse	2 A	Lightning test current, I_{imp} (10/350 μ s) GND-PE	0.2 kA
Lightning test current, I_{imp} (10/350 μ s) wire-wire	2 x 0.2 kA	Max. continuous voltage, U_c (AC)	50 V
Max. continuous voltage, U_c (DC)	72 V	Number of poles	1
Overload - failure mode	Modus 2	Protection level U_p (typ.)	< 1000 V
Protection level on output side Wire-PE 1kV/ μ s, typically	650 V	Protection level on output side Wire-wire 1 kV/ μ s, typically	650 V
Protection level on output side Wire-wire 8/20 μ s, typically	1000 V	Protection level, U_p wire - PE	1,000 V
Protection level, U_p wire - wire	650 V	Rated current I_N	2 A
Rated voltage (AC)	48 V	Rated voltage (DC)	68 V
Requirements category acc. to IEC 61643-21	C1, C2, C3, D1	Signalling contact	No
Standards	According to IEC61643-21	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/DC
Volume resistance	0.20 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

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Technical data

Tender specification sheets

Long specification	Surge protection plug for base element VSPC BASE 2/4CH, coarse common mode voltage protection for two paired cables. Version: 90 V AC Single-stage protective circuitry in plug, consisting of coarse 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.	Short specification
		Surge protection plug for base element VSPC BASE 2/4CH, coarse common mode voltage protection for two paired cables. Version: 90 V AC

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.
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Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UL)	E31 1081

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	

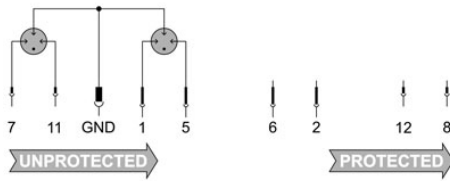
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Drawings

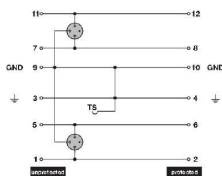
Electric symbol



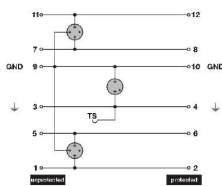
Similar to illustration

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 mit 8/20 µs	300 Surge voltage arrester
C2	Quick- rising edge	2 - 10 kV 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	0.5 - 2.5 kA mit 10/350 µs	2 Arrester for lightning current and surge voltages

Discharge capacity



Komplettmodul direkte Erdung



Komplettmodul indirekte Erdung

Komplettmodul