

**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  $\mu$ s) and 2.5 kA (10/350  $\mu$ s) to PE

**General ordering data**

Version	Surge protection for instrumentation and control, without warning function / function indicator, UP(L/N-PE) <1000 V
Order No.	<a href="#">8924570000</a>
Type	VSPC GDT 2CH 90V
GTIN (EAN)	4032248696215
Qty.	1 items

## VSPC GDT 2CH 90V

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## Technical data

## Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (UL) E311081

## Dimensions and weights

Depth	69 mm	Depth (inches)	2.7165 inch
Height	90 mm	Height (inches)	3.5433 inch
Width	17.8 mm	Width (inches)	0.7008 inch
Net weight	40 g		

## Temperatures

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

## Probability of failure

SIL in compliance with IEC 61508	3	MTTF	10378 a
SFF	100 %	λges	11
PFH in 1*10 <sup>-9</sup> per hour	0		

## Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

## Rated data UL

Certificate No. (UL)	E311081	UL certificate	UL 497b Certificate - PDF/ E311081VOL1SEC2.pdf (application/pdf)
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## CSA protection data

Gas group D	IIA	Gas groups A, B	IIC
Gas group C	IIB	Internal inductance, max. LI	0 µH
Internal capacity, max. CI	0 nF	Input voltage, max. Ui	72 V

## General data

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

## Insulation coordination acc. to EN 50178

Surge voltage category	III	Pollution severity	2
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## Technical data

## Rated data IEC / EN

Number of poles	1	Signalling contact	No
Rated voltage (AC)	48 V	Rated voltage (DC)	68 V
Rated current I <sub>N</sub>	2 A	Protection level on output side Wire-wire	650 V
		1 kV/μs, typically	
Protection level on output side Wire-PE	650 V	Protection level on output side Wire-wire	1000 V
1kV/μs, typically		8/20 μs, typically	
Protection level, UP wire - wire	650 V	Protection level, UP wire - PE	1000 V
Protection level UP (typ.)	<1000 V	Voltage type	AC/DC
Fuse protection	2 A	Volume resistance	0.20 Ω
Capacitance	9.37 pF	Standards	According to IEC61643-21
Requirements category acc. to IEC 61643-21	C1, C2, C3, D1	Max. continuous voltage, U <sub>c</sub> (AC)	50 V
Max. continuous voltage, U <sub>c</sub> (DC)	72 V	Lightning test current, I <sub>imp</sub> (10/350 μs) wire-wire	2 x 0.2 kA
Surge current-carrying capacity D1	2.5 kA 10/350 μs	Surge current-carrying capacity C1	<1 kA 8/20 μs
Surge current-carrying capacity C3	100 A 10/1000 μs	Lightning test current, I <sub>imp</sub> (10/350 μs) GND-PE	0.2 kA
Overload - failure mode	Modus 2	Discharge current I <sub>max</sub> (8/20μs) GND-PE	10 kA
Discharge current I <sub>n</sub> (8/20μs) wire-wire	2 x 2.5 kA	Discharge current I <sub>n</sub> (8/20μs) wire-PE	2.5 kA
Discharge current I <sub>max</sub> (8/20μs) wire-wire	2 x 10 kA	Discharge current I <sub>n</sub> (8/20μs) GND-PE	2.5 kA
Surge current-carrying capacity C2	5 kA 8/20 μs		

## Further details of approvals

GOST certificate	GOST-Zertifikat - PDF/7950_n1-n4.pdf (application/pdf)
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## Connection data

Type of connection	Pluggable in VSPC BASE
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## Electrical data

Voltage type	AC/DC
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## General data

Number of poles	1	Protection degree	IP20
Colour	orange		

## Ratings IECEx/ATEX/cUL

cUL certificate	cUL Certificate - pdf/ VSPC.PDF (application/pdf)
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## Guarantee

Time interval	5 years
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## Technical data

## 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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## Classifications

ETIM 7.0	EC000943	ETIM 8.0	EC000943
ETIM 9.0	EC000943	ETIM 10.0	EC000943
ECLASS 12.0	27-17-15-01	ECLASS 13.0	27-17-15-01
ECLASS 14.0	27-17-15-01	ECLASS 15.0	27-17-15-01

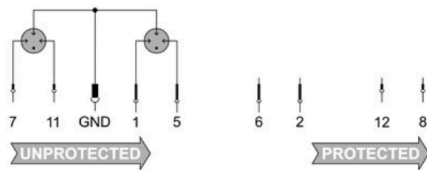
## Tender specification sheets

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
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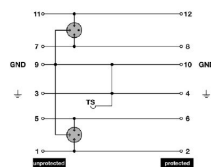
[www.weidmueller.com](http://www.weidmueller.com)

**Drawings**
**Electric symbol**


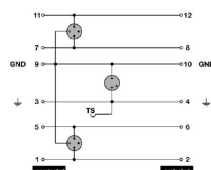
Similar to illustration

Cate- gory	Testing pulse	Surge voltage	Surge current	Pulse Type
C1	Quick- rising edge	0.5 - 2 kV with 1.2/50 µs	0.25 - 1 kA mit 8/20 µs	300 Surge voltage arrester
C2	Quick- rising edge	2 - 10 kV with 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**

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## Accessories

## V-TEST testing device for VSPC



## V-TEST

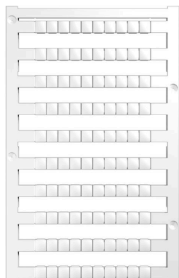
- Testing device for checking the protective function of the pluggable overvoltage protection PU I, PU II and VSPC series
- Device for implementing the IEC 62305 standard (regarding periodic testing)
- Easy-to-use device with integrated battery set for on-site measurements
- LCD results display
- Menu in two languages
- Including a protective bag and power supply
- User friendly navigation in German and English

The V-TEST is a compact, portable test instrument for the plug-in surge protectors VARITECTOR (VSPC) and the surge protectors for the power supply line PU I and PU II. Using this instrument Weidmüller overvoltage protectors can be tested for their protective function in line with the testing schedules laid down in IEC 62305-3 (DIN VDE 0185 part 3). In a display with background illumination, the test result is indicated with "OK" or "Not OK".

## General ordering data

Type	V-TEST	Version
Order No.	<a href="#">8951860000</a>	Lightning and surge protection, Testing device
GTIN (EAN)	4032248743100	
Qty.	1 ST	

## Plus



The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.

Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

## General ordering data

Type	DEK 5/5 PLUS MC NE WS	Version
Order No.	<a href="#">1854490000</a>	Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4032248393596	Weidmueller, white
Qty.	1000 ST	

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Direct earthing**

Base element for the pluggable VSPC arrester, integrated PE foot in impedance-neutral VSPC BASE. Can safely discharge up to 20 kA (8/20 µs) and 2.5 kA (10/350 µs) to the PE.

**General ordering data**

Type	VSPC BASE 2/4CH	Version	
Order No.	<a href="#">8924740000</a>	Surge protection, Flange-mounted housing, Flange-mounted housing	
GTIN (EAN)	4032248696383		
Qty.	1 ST		

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## Counterpart

## Direct earthing



Base element for the pluggable VSPC arrester, integrated PE foot in impedance-neutral VSPC BASE. Can safely discharge up to 20 kA (8/20 µs) and 2.5 kA (10/350 µs) to the PE.

## General ordering data

Type	VSPC BASE 2/4CH	Version
Order No.	<a href="#">8924740000</a>	Surge protection, Flange-mounted housing, Flange-mounted housing
GTIN (EAN)	4032248696383	
Qty.	1 ST	

## Indirect earthing / floating ground via sparkover gap, also suitable for EX ia applications



Base element for the pluggable VSPC arresters. Integrated PE foot in the base of the impedance-neutral VSPC BASE and floating earth PE connection (FG) via integrated sparkover gap, safely discharges up to 20 kA (8/20 µs) and 2.5 kA (10/350 µs) to PE. Suitable for unearthed signal circuits.

## General ordering data

Type	VSPC BASE 2/4CH FG	Version
Order No.	<a href="#">8924300000</a>	Surge protection, Flange-mounted housing, Flange-mounted housing
GTIN (EAN)	4032248695942	
Qty.	1 ST	