

## VSPC GDT 2CH 90V

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26  
D-32758 Detmold  
Germany

[www.weidmueller.com](http://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
Order No.	<a href="#">8924570000</a>
Type	VSPC GDT 2CH 90V
GTIN (EAN)	4032248696215
Qty.	1 items

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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 IN	2 A	Protection level on output side Wire-wire	650 V 1 kV/μs, typically
Protection level on output side Wire-PE	650 V 1 kV/μs, typically	Protection level on output side Wire-wire	1000 V 8/20 μs, typically
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	C1, C2, C3, D1 61643-21
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	Rated load current I <sub>L</sub>	2 A
Discharge current I <sub>n</sub> (8/20μs) wire-wire	2 x 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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### 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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**Technical data**

**Classifications**

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

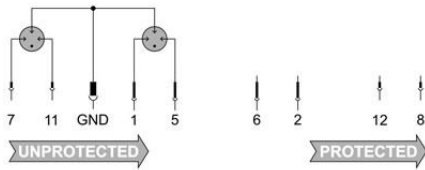
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**Drawings**

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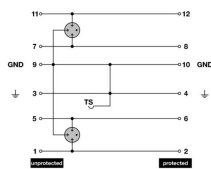
**Electric symbol**



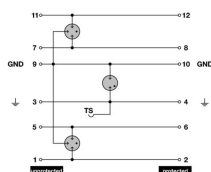
Similar to illustration

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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## 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  $\mu$ s) and 2.5 kA (10/350  $\mu$ s) 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  $\mu$ s) and 2.5 kA (10/350  $\mu$ s) 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  $\mu$ s) and 2.5 kA (10/350  $\mu$ s) 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		