SURGE PROTECTION

FOR CONTROL & INSTRUMENTATION

Weidmuller introduces a new family of surge protection modules for Control and Instrumentation in the form of its VARITECTOR SSC AND SPC modules.

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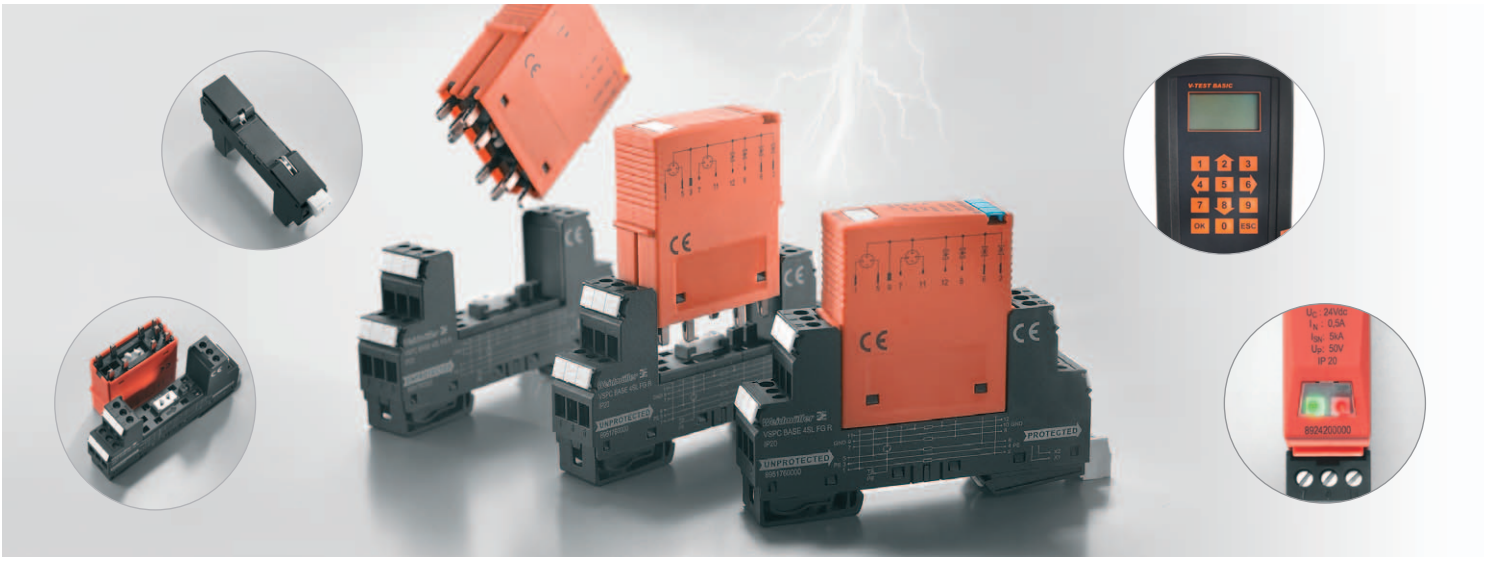
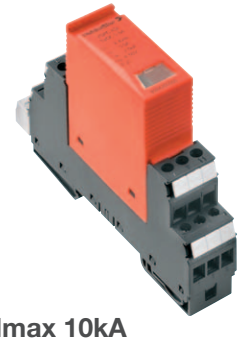
Weidmüller

VARITECTOR SPC





- **Imax 10kA**

VSPC 1CL - Protection for one analogue signal

- Optional monitoring function with status indicator and alert function
- Pluggable arrester (plug-in / disconnect interruption-free and impedance neutral)
- Testable with V-TEST instrument
- Version with non-earthed PE connection for avoiding potential differences
- Usable in accordance with installations standard IEC 62305
- Integrated PE contact in base element, safely discharges up to 20 kA (8/20 µs) and 2.5 kA (10/350 µs) to PE

VSPC 2CL - Protection for two analogue signals

- Optional monitoring function with status indicator and alert function
- Pluggable arrester (plug-in / disconnect interruption-free and impedance neutral)
- Testable with V-TEST instrument
- Space-saving design for two analoge signals with signaling contact, without additional space requirements
- Version with non-earthed PE connection for avoiding potential differences
- Usable in accordance with installations standard IEC 62305
- Integrated PE contact in base element, safely discharges up to 20 kA (8/20 µs) and 2.5 kA (10/350 µs) to PE

Technical Data

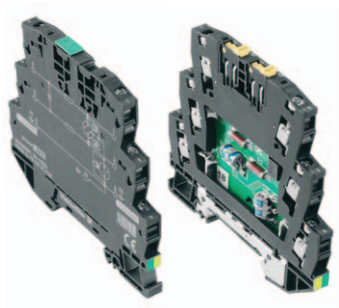
Dielectric strength with FG against PE	> 500 V
Volume resistivity per path	2.2 Ω
Overstressed fault mode	Mode 2
Requirement category acc. to IEC 61643-21	C1; C2; C3; D1
Surge strength C1	< 1 kA / 8/20 µs
Surge strength C2	5 kA / 8/20 µs
Surge strength C3	100 A / 10/1000 µs
Surge strength D1	1 kA 10/350 µs
Rated discharge current I_N (8/20 µs) wire-wire / wire-PE / GND-PE	2.5 kA / 2.5 kA / 2.5 kA
Rated discharge current I_{max} (8/20 µs) wire-wire / wire-PE / GND-PE	10 kA / 10 kA / 10 kA
Lightning test current I_{imp} (10/350 µs) wire-wire / wire-PE / GND-PE	2.5 kA / 2.5 kA / 2.5 kA
Type of connection	Pluggable in VSPC BASE
Storage temperature	-40 °C…+80 °C
Ambient temperature (operational)	-40 °C…+70 °C
Rel. humidity	5 %…96 % RH
Degree of protection	IP20

Ordering data for base		**VSPC 1CL**	**VSPC 2CL**
Type	**Qty.**	**Order No.**	**Order No.**
Base element, direct earthing	1	**8924730000**	**8924710000**
Base element, indirect earthing Via spark gap (FG, floating ground)	1	**8924290000**	**8924270000**
Base element, direct earthing with remote alert	1	**8951730000**	**8951710000**
Base element, indirect earthing with remote alert	1	**8951740000**	**8951720000**

Ordering Data

		VSPC 1CL 24 V DC	**VSPC 2CL 24 V DC**
Rated voltage (DC)		24 V DC	24 V DC
Max. continuous voltage, U_c (DC)		28 V DC	28 V DC
Alternating-current strength			
Rated current		450 mA	450 mA
Surge strength			
Signaling contact		U_N 250 V AC 0.1 A 1CO at VSPC R with VSPC CONTROL UNIT	U_N 250 V AC 0.1 A 1CO at VSPC R with VSPC CONTROL UNIT
Optical function indicator (VSPC R)		green = OK; red = arrester faulty, replace	green = OK; red = arrester faulty, replace
Transmission test (-3dB)		730 KHz	2.2 MHz
Impulse reset		30 ms	30 ms
tested		acc. to IEC61643-21	acc. to IEC61643-21
Residual voltage U_p		< 650 V	< 800 V
wire-wire / wire-PE / GND-PE		**45 V** / 450 V / 650 V	**45 V** / 450 V / 800 V
Protection level on output side sym.,			
input 1 kV/µs, typ.		< 45 V	< 45 V
input 8/20 µs, typ.		< 45 V	< 45 V
Protection level on output side unsym.,			
input 1 kV/µs, typ.		< 450 V	< 450 V
input 8/20 µs, typ.		< 650 V	< 800 V
Ordering data			
Without signaling contact/function indicator	Type	VSPC 1CL 24VDC 0.5A	VSPC 2CL 24VDC 0.5A
	Order No.	**8924480000**	**8924470000**
With signaling contact/function indicator	Type	VSPC 1CL 24VDC 0.5A R	VSPC 2CL 24VDC 0.5A R
	Order No.	**8951550000**	**8951480000**

VARITECTOR SSC



- **Imax 5kA**

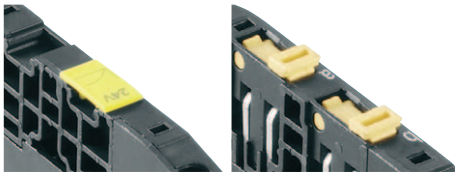
VSSC 6AN CL and TR CL - Protection for analogue signals (CL) with and without disconnect lever (TR)

- Optional monitoring function with status indicator and alert function
- Pluggable arrester (plug-in / disconnect interruption-free and impedance neutral)
- Testable with V-TEST instrument
- Version with non-earthed PE connection for avoiding potential differences
- Usable in accordance with installations standard IEC 62305
- Integrated PE contact in base element, safely discharges up to 20 kA (8/20 µs) and 2.5 kA (10/350 µs) to PE

Technical Data

Nominal current	500 mA (see derating curve)
Dielectric strength at FG against PE	-
Volume resistivity	1.8 Ω ± 10 %
Overstressed fault mode	Mode 2
Requirement category IEC 61643-21	C2; C3; D1
Standards	IEC 61643-21
Surge strength C2	2.5 kA
Surge strength C3	50 A
Surge strength D1	0.5 kA
Rated discharge current I_N (8/20 µs) wire-wire / wire-PE / GND-PE	2.5 kA / 2.5 kA / –
Rated discharge current I_{max} (8/20 µs) wire-wire / wire-PE / GND-PE	5 kA / 5 kA / –
Lightning test current I_{imp} (10/350 µs) wire-wire / wire-PE / GND-PE	– / 0.5 kA / –
Storage temperature	-40 °C...+80 °C
Ambient temperature (operational)	-40 °C...+70 °C
Humidity	5...96 % RH
Degree of protection	IP20
Flammability class	V0

Ordering Data



	CL 24 V UC	TR CL 24 V UC
Rated voltage AC/DC	24 V AC / 34 V DC	24 V AC/ 34 V DC
Max. continuous voltage U_c (AC) / (DC)	30 V AC / 42 V DC	30 V AC/ 42 V DC
Signal transmission properties (-3 dB)	≤ 700 kHz	≤ 700 kHz
Pulse reset capacity	≤ 170 ms	≤ 170 ms
Residual voltage U_p	≤ 1650 V	≤ 1650 V
wire-wire / wire-PE / GND-PE	**90 V** / 900 V / -	**90 V** / 900 V / -
Protection level on output side sym., input 1 kV/µs, typ.	70 V	70 V
Protection level on output side unsym., input 1 kV/µs, typ.	900 V	900 V
Disconnect lever		Yes
Testing option		Functional screw with test plug receptacle connection 1, 2, 4, 5
Ordering data		
Type	VSSC6 CL 24Vuc 0.5A	VSSC6 TR CL 24Vuc 0.5A
Order No.	**1064170000**	**1064230000**

V-TEST

A testing device for pluggable surge protection: for testing in compliance with the IEC 62305-3 standard

The V-TEST is a compact and portable testing device intended for the pluggable VARITECTOR SPC (measurement and control) and the PU I/PU II (power supply) surge protection product lines. This testing device can be used to check the functionality of Weidmuller's surge protection components in accordance with the test intervals stipulated in IEC 62305-3. It indicates the functional state of protective components.

The backlit display shows the measured reading per component (GDT, MOV, TAZ) as „ok" or „not ok". This function allows you to detect ageing components by displaying possible damages right away. Thus total protection in guaranteed.

The V-TEST is equipped with a charger and a battery set which allows autonomous use in the field. A comfortable and protective carry bag is delivered free with the tester.

Technical data

Rated voltage	100...240 V AC
Accumulator set	8 NiMH with 2600 mA
Storage temperature	0 °C ... 40 °C
Ambient temperature (operational)	0 °C ... 40 °C
Degree of protection	IP20
Measuring range	U < 1000 V / I = 1 mA
UL94 flammability class	V0
General tolerances of measurement range	
Gas discharge tube	+/- 10%
Varistor	+/- 5%
TVS-diode	+/- 5%

Ordering data

Dimensions		
Length x Width x Height	mm	230 x 122 x 65
Ordering data		
	Type	V-Test
	Order No.	**8951860000**
	Qty.	1

www.weidmuller.com.au

Available from your local Power Product Distributor

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Ramelec (NSW) Pty Ltd
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PDC Group (Aust) Pty Ltd
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NSW: Wollongong & Southern NSW
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