VSSC6TRCLFG24VAC/DC EX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Overvoltage coupling along the conductor path may disturb or destroy sensitive signal inputs. It is important to provide protection in the immediate vicinity of I&C devices. Weidmüller's broad product range for the I&C sector offers products in a 2-piece, pluggable design and modular terminals for tension clamp or screw connection. These products are suitable for both binary and analogue signals. Weidmüller also offers other designs with integrated components such as gas discharge tubes or varistors. VARITECTOR stands for flexible and variable surge protection by Weidmüller, tested according to product standard IEC61643-21. The VARITECTOR series can be used in applications according to IEC 61643-22 / VDE 0845-3 for classes C1, C2, C3 and D1. The VARITECTOR SPC, SSC and MCZ OVP product families optimally combine electrical and mechanical properties. Size and easy handling play an important role. This surge protection is suited for confined spaces in industrical and process automation as well as in building automation applications.

General ordering data

Version	Surge protection for instrumentation and control, 24 V, 34 V, 300 mA, IEC61643-21:2009, DIN EN 60079-0.2009, DIN EN 60079-26:2007, DIN EN 61241-11:2006, HART-compatible
Order No.	1066490000
Type	VSSC6TRCLFG24VAC/DC EX
GTIN (EAN)	4032248820122
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	81 mm	Depth (inches)	3.189 inch
Height	88.5 mm	Height (inches)	3.484 inch
Net weight	60.6 g	Width	12.4 mm
Width (inches)	0.488 inch		

Temperatures

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

Probability of failure

SIL PAPER	SIL Paper	SIL in compliance with IEC 61508	3
MTTF	3,936 Jahre	SFF	93.28 %
λges	29	PFH in $1*10^{-9}$ per hour	1.95

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1

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
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	0.75 W	Input voltage, max. U_i	42 V
Internal capacity, max. C_i	2 nF	Internal inductance, max. L_i	0 µH
Temperature class T4/135°C (-40°C ... +120 °C) Ii	300 mA	Temperature class T5/100°C (-40 ° C ... +85 °C) Ii	300 mA
Temperature class T6/85 °C (-40 °C ... +70 °C) Ii	300 mA		

CSA protection data

Gas group C	IIB	Gas group D	IIA
Gas groups A, B	IIC	Input current, max. I_i	300 mA
Input voltage, max. U_i	42 V	Internal capacity, max. C_i	1 nF
Internal inductance, max. L_i	0 µH		

General data

Colour	Light Blue	Design	Terminal
Isolating function	Yes	Optical function display	No
Protection degree	IP20	Rail	TS 35
Segment	Measurement - Monitoring - Setting	Testing option	Functional screw with test plug receptacle, connections 1, 2, 4, 5
UL 94 flammability rating	V-0	Version	Surge protection for measurement and control

Insulation coordination acc. to EN 50178

Pollution severity	2	Surge voltage category	III

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Rated data IEC / EN

Dielectric strength at FG against PE	≥ 500 V	Discharge current I_{max} (8/20µs) wire-PE	5 kA
Discharge current I_{max} (8/20µs) wire-wire	5 kA	Discharge current I_n (8/20µs) wire-PE	2.5 kA
Discharge current I_n (8/20µs) wire-wire	2.5 kA	Discharge current, max. (8/20 µs)	10 kA
Input voltage, max. U_i	42 V	Insertion loss	250 MHz
Lightning test current I_{imp} (10/350 µs)	0.5 kA	Lightning test current, I_{imp} (10/350 µs) Wire–PE	0.5 kA
Max. continuous voltage, Uc (AC)	30 V	Max. continuous voltage, Uc (DC)	42 V
Number of poles	1	Overload - failure mode	Modus 2
Protection level U_P (typ.)	≤ 1870 V	Protection level on output side Wire-wire 1 kV/µs, typically	70 V
Protection level, U_P wire - wire	90 V	Pulse-reset capacity	≤ 20 ms
Rated current I_N	300 mA	Rated voltage (AC)	24 V
Rated voltage (DC)	34 V	Requirements category acc. to IEC 61643-21	C2, C3, D1
Signal transmission properties (-3 dB)	270 Mhz	Standards	IEC61643-21:2009, DIN EN 60079-0.2009, DIN EN 60079-26:2007, DIN EN 61241-11:2006, HART-compatible
Surge current-carrying capacity C2	2.5 kA 8/20 µs 5 kV 1.2/50 µs	Surge current-carrying capacity C3	50 A 10/1000 µs
Surge current-carrying capacity D1	0.5 kA 10/350 µs	Voltage type	DC
Volume resistance	1.8 Ω 10 %		

Further details of approvals

GOST certificate	GOST-Zertifikat

Connection data

Type of connection	Screw connection	Tightening torque, min.	0.5 Nm
Tightening torque, max.	0.8 Nm	Clamping range, min.	0.5 mm²
Clamping range, max.	4 mm²	Wire cross-section, solid, min.	0.5 mm²
Wire cross-section, solid, max.	6 mm²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	4 mm²	Connection cross-section, stranded, min.	0.5 mm²
Connection cross-section, stranded, max.	4 mm²		

Ratings IECEx/ATEX/cUL

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
ATEX certificate	ATEX Certificate	IEC Ex certificate	IECEX Zertifikat
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
cUL certificate	cUL Certificate		

Classifications

ETIM 6.0	EC000943	ETIM 7.0	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

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Technical data

Tender specification sheets

Long specification	Surge protection in a one piece, 12.4 mm wide terminal rail module for a floating-ground, intrinsically safe signal circuit with 48 VUC in 2-wire technology. A current loop with max. 0.6 A can be protected here. Each signal path can be opened using an isolator. When the terminal is fitted, a sparkover gap is simultaneously created to the high-impedance earth between the terminal rail (earth) and the reference potential (ground) of the protective circuit. Optical identification of the terminal based on the type of protective circuit and the voltage level. The terminal can be labelled.	Short specification	Surge protection in a one piece, 12.4 mm wide terminal rail module for an intrinsically safe, floating-ground driven signal circuit with 2-wire technology and a common wire. Each signal path can be opened using an isolator. Version: 48 VUC

Approvals

Approvals	
ROHS	Conform

Downloads

Approval/Certificate/Document of Conformity	SIL Paper Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Instruction sheet VSSC Instruction sheet VSSC EX

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Drawings

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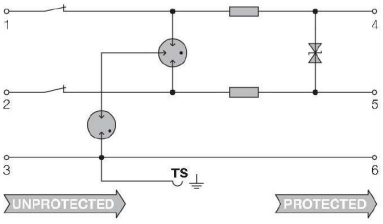

Circuit diagram