

VSSC4 GDT55VUC 20KA EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Surge protection with individual components
 With gas discharge tubes in terminal design
 Gas discharge tubes/spark gaps (GDT) are used in the terminal design. They are approved for a maximum DC voltage, which is printed on the component. Any voltage greater than the specified value is safely discharged in approx. 10-100 μ s. Gas discharge tubes are used for higher power ratings. Any voltage greater than that specified is safely discharged in approx. 10-100 μ s. Gas discharge tubes are used for higher power ratings.

General ordering data

Version	Surge protection for instrumentation and control, Surge protection for measurement and control
Order No.	1064040000
Type	VSSC4 GDT55VUC 20KA EX
GTIN (EAN)	4032248829453
Qty.	5 items

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Technical data

Approvals

Approvals



ROHS Conform

Dimensions and weights

Depth	58.5 mm	Depth (inches)	2.3031 inch
Height	76 mm	Height (inches)	2.9921 inch
Width	12.4 mm	Width (inches)	0.4882 inch
Net weight	9.86 g		

Temperatures

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

Probability of failure

SIL in compliance with IEC 61508	3	MTTF	11416 a
SFF	100 %	λ_{ges}	10
PFH in 1*10 ⁻⁹ per hour	0		

Environmental Product Compliance

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

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. PI	0.75 W	Internal capacity, max. CI	0 nF
Internal inductance, max. LI	0 μ H	Temperature class T4/135°C (-40°C ... +120 °C) li	300 mA
Temperature class T5/100°C (-40 °C ... +85 °C) li	300 mA	Temperature class T6/85 °C (-40 °C ... +70 °C) li	300 mA

CSA protection data

Gas group D	IIA	Gas groups A, B	IIC
Input-current, max. II	300 mA	Gas group C	IIB
Internal inductance, max. LI	0 μ H	Internal capacity, max. CI	0 nF

General data

Optical function display	No	Segment	Measurement - Monitoring - Setting
Version	Surge protection for measurement and control	Colour	Light Blue
Protection degree	IP20	Mounting rail	TS 35
Isolating function	No		

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Insulation coordination acc. to EN 50178

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

Number of poles	1	Rated voltage (AC)	55 V
Rated current I _N	300 mA	Volume resistance	<0.1 Ω
Capacitance	4.65 pF	Lightning test current I _{imp} (10/350 μs)	2.5 kA
Discharge current, max. (8/20 μs)	20 kA	Dielectric strength at FG against PE	≥ 500 V
Surge current-carrying capacity D1	2.5 kA 10/350 μs	Surge current-carrying capacity C3	100 A 10/1000 μs
Pulse-reset capacity	≤ 20 ms	Overload - failure mode	Modus 2
Rated load current I _L	300 mA	Discharge current I _{max} (8/20 μs) wire-PE20 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

Stripping length	10 mm	Type of connection	Screw connection
Tightening torque, min.	0.5 Nm	Tightening torque, max.	0.8 Nm
Clamping range, min.	0.5 mm ²	Clamping range, max.	4 mm ²
Wire cross-section, solid, min.	0.5 mm ²	Wire cross-section, solid, max.	6 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	4 mm ²
Connection cross-section, stranded, min.	0.5 mm ²	Connection cross-section, stranded, max.	4 mm ²

General data

Number of poles	1	Protection degree	IP20
Colour	Light Blue		

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	11ATEX0023X
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 - pdf/ VSSC.PDF (application/pdf)		

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 8.0	EC000943	ETIM 9.0	EC000943
ETIM 10.0	EC000943	ECLASS 14.0	27-17-15-02
ECLASS 15.0	27-17-15-02		

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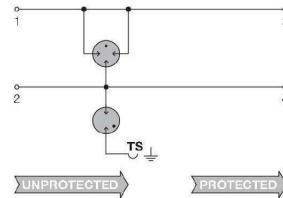
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Drawings

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Similar to illustration



Circuit diagram

