

**VSSC4 GDT55VUC 20KA EX**

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

[www.weidmueller.com](http://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  $\mu$ s. Gas discharge tubes are used for higher power ratings. Any voltage greater than that specified is safely discharged in approx. 10-100  $\mu$ 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.	<a href="#">1064040000</a>
Type	VSSC4 GDT55VUC 20KA EX
GTIN (EAN)	4032248829453
Qty.	5 items

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## Technical data

## Approvals

Approvals



CSA EX ATEX



IECEx

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	11.2 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 %	λages	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 µH	Temperature class T4/135°C (-40°C ... +120 °C) li	300 mA
Temperature class T5/100°C (-40 °C ... +85 °C) li		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 µH	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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## Technical data

## 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 IN	300 mA	Volume resistance	<0.1 Ω
Capacitance	4.65 pF	Lightning test current limp (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 IL	300 mA	Discharge current I <sub>max</sub> (8/20µs) 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 <sup>2</sup>	Clamping range, max.	4 mm <sup>2</sup>
Wire cross-section, solid, min.	0.5 mm <sup>2</sup>	Wire cross-section, solid, max.	6 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	4 mm <sup>2</sup>
Connection cross-section, stranded, min. 0.5 mm <sup>2</sup>		Connection cross-section, stranded, max.	4 mm <sup>2</sup>

## 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	IECEx 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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**Technical data****Tender specification sheets**

Long specification	Feed-through terminal, 12.4mm wide with gas-filled surge voltage arrester between the signal line connection and the mounting rail potential, TS 35 contact base. An intrinsically safe signal with max. 0.3A can be protected here. When the terminal is fitted, a simultaneous electrically conducting contact is made between the mounting rail (earth) and the reference potential (ground) of the protection circuit in the terminal. Optical identification of the terminal based on the type of protected switching and the voltage level. The terminal can be labelled or marked. Suitable for ATEX applications. Tested to Ex area ignition protection types: Ex ia IIC / Ex iaD	Short specification	Feed-through terminal with gas-filled surge voltage arrester between the signal line connection and the mounting rail potential, TS 35 contact base. Version: 55V UC. Suitable for ATEX applications.
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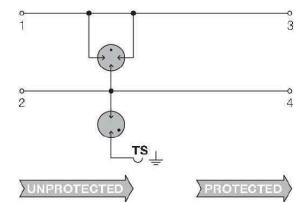
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**Drawings**

Similar to illustration



Circuit diagram



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## Accessories

## Accessories (end plates)

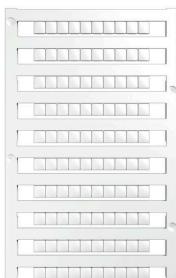


End plates (AP) for the VSSC product series in light blue and black

## General ordering data

Type	AP VSSC4 LB	Version
Order No.	<a href="#">1067240000</a>	VSSC, End plate
GTIN (EAN)	4032248999873	
Qty.	50 ST	

## Blank



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 MC NE WS	Version
Order No.	<a href="#">1609801044</a>	Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4008190397111	Weidmueller, white
Qty.	1000 ST	