

VSSC4 GDT55VUC 20kA EX

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16

D-32758 Detmold

Germany

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Surge protection with individual components
 With gas-discharge tubes in terminal design
 Gas-discharge tubes / sparkover gaps (GDT) are designed with a terminal shape. They are approved for a maximum DC voltage, which is printed on the component. Any voltage greater than the amount specified is safely discharged within about 10-100µs. Gas arresters can be used for high-power applications.

General ordering data

| | |
|------------|--|
| Order No. | 1064040000 |
| Type | VSSC4 GDT55VUC 20kA EX |
| Version | Surge protection for instrumentation and control |
| GTIN (EAN) | 4032248829453 |
| Qty. | 5 pc(s). |

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Technical data**Dimensions and weights**

| | | | |
|-------|---------|------------|--------|
| Width | 12.2 mm | Height | 76 mm |
| Depth | 58.5 mm | Net weight | 33.6 g |

Temperatures

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

Probability of failure

| | | | |
|-----------------------------------|----|------|--------------|
| λ_{ges} | 10 | MTTF | 11,416 Years |
| PFH in $1 \cdot 10^{-9}$ per hour | 0 | SFF | 100 % |
| SIL in compliance with IEC 61508 | 3 | | |

General data

| | | | |
|---------------------------|------------|--------------------------|-----------------------------|
| Colour | Light Blue | Isolating function | No |
| Mounting rail | TS 35 | Optical function display | No |
| Protection degree | | Segment | Instrumentation and Control |
| | IP 20 | | |
| UL 94 flammability rating | V-0 | | |

Insulation coordination acc. to EN 50178

| | | | |
|--------------------|---|------------------------|-----|
| Pollution severity | 2 | Surge voltage category | III |
|--------------------|---|------------------------|-----|

technical data

| | | | |
|--|----------------|---|---|
| Rated voltage (AC) | 55 V | Rated voltage (DC) | 38 V |
| Rated current | 300 mA | Max. continuous voltage, U_c (AC) | 55 V |
| Max. continuous voltage, U_c (DC) | 38 V | Discharge current I_n (8/20 μ s) wire-PE | 5 kA |
| Discharge current I_{max} (8/20 μ s) wire-PE | 20 kA | Discharge current, max. (8/20 μ s) | 20 kA |
| Protection level U_p (typ.) | | Standards | IEC61643-21:2009, DIN EN 60079-0:2009, DIN EN 60079-26:2007, DIN EN 61241-11:2006 |
| | ≤ 1800 V | Humidity | 5...96 % |
| Colour | Light Blue | Lightning test current I_{imp} (10/350 μ s) | 2.5 kA |
| Requirements category acc. to IEC 61643-21 | C2, C3, D1 | Capacitance | 4.65 pF |
| Volume resistance | $< 0.1 \Omega$ | Dielectric strength at FG against PE | ≥ 500 V |
| Residual voltage, U_p typical | 845 V | | |
| Overload - failure mode | Modus 2 | | |

Connection data

| | | | |
|---|---------------------|---|-------------------|
| Clamping range, rated connection, min. | 0.5 mm ² | Clamping range, rated connection, max. | 4 mm ² |
| Wire connection cross section, stranded, rated connection, min. | 0.5 mm ² | Wire connection cross section, stranded, rated connection, max. | 4 mm ² |
| Tightening torque, min. | 0.5 Nm | Tightening torque, max. | 0.8 Nm |

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Technical data**EX protection data**

| | | | |
|---|-----------|---|--------|
| Input power, max. P_I | 0.75 W | Internal capacitance, max. C_I | 0 nF |
| Internal inductance, max. L_I | 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 |

Further details of approvals

| | |
|------------------|-----------------|
| GOST certificate | GOST-Zertifikat |
|------------------|-----------------|

Rated data UL

| | |
|----------------|---------------|
| UL certificate | UL Zertifikat |
|----------------|---------------|

Ratings IECEx/ATEX

| | | | |
|------------------|------------------|--------------------|-------------|
| ATEX certificate | ATEX Certificate | IEC Ex certificate | 11ATEX0023X |
|------------------|------------------|--------------------|-------------|

Classifications

| | | | |
|------------|-------------|------------|-------------|
| ETIM 3.0 | EC000943 | UNSPSC | 30-21-18-11 |
| eClass 4.1 | 27-14-11-27 | eClass 5.1 | 27-14-11-27 |
| eClass 6.2 | 27-13-08-02 | eClass 7.1 | 27-13-08-02 |

Approvals

Approvals



ROHS Conform

Probability of failure

| | |
|-----------|---------------------------|
| SIL PAPER | SIL Paper |
| | 3-D model |

Downloads

| | |
|---------------------------|--|
| Package insert | Instruction sheet |
| Declaration of Conformity | K378_02_11.pdf |
| PDF | Type examination certificate |
| | 3-D model |

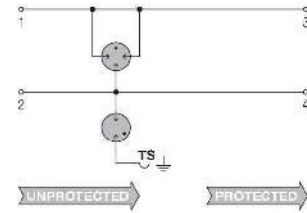
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Drawings



Similar to illustration



Circuit diagram