

**MCZ OVP CL 48VUC 0,5A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

Slimline overvoltage protection terminal with tension clamp connection

- 6 mm Slimline fine overvoltage protection
- fast wiring thanks to TS contact and tension clamp connections
- can be cross-connected

**General ordering data**

|            |                                                                     |
|------------|---------------------------------------------------------------------|
| Version    | MCZ SERIES, Surge protection for instrumentation and control, 0.5 A |
| Order No.  | <a href="#">8449000000</a>                                          |
| Type       | MCZ OVP CL 48VUC 0,5A                                               |
| GTIN (EAN) | 4008190156114                                                       |
| Qty.       | 10 pc(s).                                                           |

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Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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**Technical data****Dimensions and weights**

|                |            |                 |            |
|----------------|------------|-----------------|------------|
| Depth          | 63.5 mm    | Depth (inches)  | 2.5 inch   |
| Height         | 91 mm      | Height (inches) | 3.583 inch |
| Net weight     | 25.4 g     | Width           | 6 mm       |
| Width (inches) | 0.236 inch |                 |            |

**Temperatures**

|                     |                |                       |                |
|---------------------|----------------|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -40 °C...60 °C |
|---------------------|----------------|-----------------------|----------------|

**Environmental Product Compliance**

|            |                |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

**Rated data UL**

|                      |         |
|----------------------|---------|
| Certificate No. (UL) | E311081 |
|----------------------|---------|

**General data**

|                           |         |                   |                                                 |
|---------------------------|---------|-------------------|-------------------------------------------------|
| Colour                    | black   | Design            | Terminal                                        |
| Height with TS 35         | 63.5 mm | Protection degree | IP20                                            |
| Rail                      | TS 35   | Segment           | Measurement - Monitoring<br>- Setting           |
| UL 94 flammability rating | V-0     | Version           | Surge protection for<br>measurement and control |

**Insulation coordination acc. to EN 50178**

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

**Rated data IEC / EN**

|                                                                       |                 |                                                                      |                      |
|-----------------------------------------------------------------------|-----------------|----------------------------------------------------------------------|----------------------|
| Discharge current, $I_{imp}$ (10/350 $\mu$ s)                         | 2.5 kA          | Discharge current, max. (8/20 $\mu$ s)                               | 5 kA                 |
| Fuse                                                                  | 0.5 A           | Inductance L and L1                                                  | 75 $\mu$ H           |
| Lightning test current $I_{imp}$ (10/350 $\mu$ s)                     | 2.5 kA          | Limiting frequency (-3 dB) at load resistance                        | 500 kHz 240 $\Omega$ |
| Load resistance (for limiting frequency)                              | 240 $\Omega$    | Max. continuous voltage, $U_c$ (AC)                                  | 53 V                 |
| Operating current, $I_{max}$                                          | 0.5 A           | Operating voltage                                                    | 75 V                 |
| Protection level on output side Wire-PE<br>1 kV/ $\mu$ s, typically   | 80 V            | Protection level on output side Wire-PE<br>8/20 $\mu$ s, typically   | 150 V                |
| Protection level on output side Wire-wire<br>1 kV/ $\mu$ s, typically | 82 V            | Protection level on output side Wire-wire<br>8/20 $\mu$ s, typically | 150 V                |
| Rated current $I_N$                                                   | 0.5 A           | Rated voltage (AC)                                                   | 48 V                 |
| Rated voltage (DC)                                                    | 48 V            | Rated voltage (DC), max.                                             | 70 V                 |
| Requirements category acc. to IEC<br>61643-21                         | D1              | Response time                                                        | $\leq 100$ ps        |
| Standards                                                             | HART-compatible | Voltage type                                                         | AC/DC                |
| Volume resistance                                                     | 2.50 $\Omega$   |                                                                      |                      |

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## Technical data

## Connection data

|                                                                                         |                          |                                                                                         |                     |
|-----------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------|---------------------|
| Cross-section                                                                           | 1.5 mm <sup>2</sup>      | Wire connection method                                                                  | Spring connection   |
| Type of connection                                                                      | Tension-clamp connection | Stripping length, rated connection                                                      | 8 mm                |
| Clamping range, rated connection                                                        | 1.5 mm <sup>2</sup>      | Clamping range, min.                                                                    | 0.5 mm <sup>2</sup> |
| Clamping range, max.                                                                    | 1.5 mm <sup>2</sup>      | Wire connection cross section AWG, min.                                                 | AWG 26              |
| Wire connection cross section AWG, max.                                                 | AWG 16                   | Wire cross-section, solid, min.                                                         | 0.5 mm <sup>2</sup> |
| Wire cross-section, solid, max.                                                         | 1.5 mm <sup>2</sup>      | Wire cross-section, solid, min. (AWG)                                                   | AWG 26              |
| Wire cross-section, solid, max. (AWG)                                                   | AWG 16                   | Wire connection cross section, finely stranded, min.                                    | 0.5 mm <sup>2</sup> |
| Wire connection cross section, finely stranded, max.                                    | 1.5 mm <sup>2</sup>      | Wire cross-section, finely stranded, min. (AWG)                                         | AWG 26              |
| Wire cross-section, finely stranded, max. (AWG)                                         | AWG 16                   | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.5 mm <sup>2</sup> |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 1.5 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.                              | 1.5 mm <sup>2</sup>      | Blade size                                                                              | 0.6 x 3.5 mm        |

## 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 |

## Approvals

Approvals



|                       |         |
|-----------------------|---------|
| ROHS                  | Conform |
| UL File Number Search | E311081 |

## Downloads

|                                             |                                                                       |
|---------------------------------------------|-----------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">CE PAPER</a><br><a href="#">Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">STEP</a>                                                  |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>                                          |
| User Documentation                          | <a href="#">Instruction sheet</a>                                     |

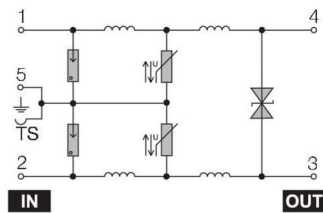
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## Drawings

### Electric symbol



Circuit diagram