

## MCZ R 120VAC

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

### Product image



Similar to illustration

High reliability in a terminal block format

MCZ SERIES relay modules are among the smallest on the market. Thanks to the small width of just 6.1 mm, a lot of space can be saved in the panel. All products in the series have three cross-connection terminals and are distinguished by simple wiring with plug-in cross-connections. The tension clamp connection system, proven a million times over, and the integrated reverse polarity protection ensure a high level of safety during installation and operation. Precisely fitting accessories from cross-connectors to markers and end plates make the MCZ SERIES versatile and convenient to use.

- Tension clamp connection
- Integrated cross-connection in input/output.
- Clampable conductor cross-section is 0.5 to 1.5 mm<sup>2</sup>
- Variants of the MCZ TRAK type are particularly suitable for the transport sector and tested according to DIN EN 50155

### General ordering data

|            |                                                                                                                                                                     |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version    | MCZ SERIES, Relay module, Number of contacts: 1, CO contact AgSnO, Rated control voltage: 120 V AC -15 % / +10 %, Continuous current: 6 A, Tension-clamp connection |
| Order No.  | <a href="#">8420880000</a>                                                                                                                                          |
| Type       | MCZ R 120VAC                                                                                                                                                        |
| GTIN (EAN) | 4008190227036                                                                                                                                                       |
| Qty.       | 10 pc(s).                                                                                                                                                           |

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## Technical data

## Dimensions and weights

|                |           |                 |            |
|----------------|-----------|-----------------|------------|
| Depth          | 63.2 mm   | Depth (inches)  | 2.488 inch |
| Height         | 91 mm     | Height (inches) | 3.583 inch |
| Net weight     | 24.8 g    | Width           | 6.1 mm     |
| Width (inches) | 0.24 inch |                 |            |

## Temperatures

|                     |                                                   |                       |                |
|---------------------|---------------------------------------------------|-----------------------|----------------|
| Storage temperature | -40 °C...60 °C                                    | Operating temperature | -25 °C...50 °C |
| Humidity            | 5 - 93% rel. humidity, Tu = 40°C, no condensation |                       |                |

## Environmental Product Compliance

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

## Rated data UL

|                         |         |
|-------------------------|---------|
| Certificate No. (cURus) | E141197 |
|-------------------------|---------|

## Control side

|                                |                          |                                |                       |
|--------------------------------|--------------------------|--------------------------------|-----------------------|
| Power rating                   | 0.85 VA                  | Protective circuit             | RC element, Rectifier |
| Pull-in/drop-out current, typ. | 4 mA / 1.3 mA AC         | Pull-in/drop-out voltage, typ. | 85 V / 17 V AC        |
| Rated control voltage          | 120 V AC + 10 % / - 15 % | Rated current AC               | 7 mA                  |
| Status indicator               | Green LED                |                                |                       |

## Load side

|                                         |                                         |                            |          |
|-----------------------------------------|-----------------------------------------|----------------------------|----------|
| AC switching capacity (resistive), max. | 1500 VA                                 | Continuous current         | 6 A      |
| DC switching capacity (resistive), max. | 144 W @ 24 V                            | Inrush current             | 6 A      |
| Max. switching frequency at rated load  | 0.1 Hz                                  | Max. switching voltage, DC | 250 V    |
| Min. switching power                    | 1 mA @ 24 V, 10 mA @ 10 V, 100 mA @ 5 V | Rated switching voltage    | 250 V AC |
| Switch-off delay                        | ≤ 35 ms                                 | Switch-on delay            | ≤ 17 ms  |

## Contact data

|              |                      |                         |                                       |
|--------------|----------------------|-------------------------|---------------------------------------|
| Contact type | 1 CO contact (AgSnO) | Mechanical service life | 10 x 10 <sup>6</sup> switching cycles |
|--------------|----------------------|-------------------------|---------------------------------------|

## General data

|                                      |                          |         |  |
|--------------------------------------|--------------------------|---------|--|
| Rail                                 | TS 35                    |         |  |
| Test button                          | No                       |         |  |
| Mechanical switch position indicator | No                       |         |  |
| Open sides                           | right                    |         |  |
| Colour                               | beige                    |         |  |
| UL94 flammability rating component   | Component                | Housing |  |
|                                      | UL94 flammability rating | V-0     |  |

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## Insulation coordination

|                                                |                           |                                      |                              |
|------------------------------------------------|---------------------------|--------------------------------------|------------------------------|
| Creepage and clearance distance input – output | ≥ 5.5 mm                  | Dielectric strength to mounting rail | 4 kV <sub>eff</sub> / 1 Min. |
| Dielectric strength, Input/Output              | 4 kV <sub>eff</sub> / 1 s | Impulse withstand voltage            | 4 kV (1.2/50 µs)             |
| Pollution severity                             | 2                         | Protection degree                    | IP20                         |
| Rated voltage                                  | 300 V                     | Surge voltage category               | III                          |

## Further details of approvals / standards

|                         |                     |                       |                |
|-------------------------|---------------------|-----------------------|----------------|
| Standards               | DIN EN 50178, UL508 | Certificate No. (CSA) | 154685-1198742 |
| Certificate No. (cURus) | E141197             |                       |                |

## Connection data

|                                                                                         |                          |                                                                                         |                     |
|-----------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------|---------------------|
| Wire connection method                                                                  | 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    | EC001437    | ETIM 7.0    | EC001437    |
| ECLASS 9.0  | 27-37-16-01 | ECLASS 9.1  | 27-37-16-01 |
| ECLASS 10.0 | 27-37-16-01 | ECLASS 11.0 | 27-37-16-01 |

## Important note

|                     |                                         |
|---------------------|-----------------------------------------|
| Product information | The cable lengths must not exceed 30 m. |
|---------------------|-----------------------------------------|

## Approvals

Approvals



|                       |         |
|-----------------------|---------|
| ROHS                  | Conform |
| UL File Number Search | E141197 |

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### Downloads

|                                             |                                                                         |
|---------------------------------------------|-------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">STEP</a>                                                    |
| Engineering Data                            | <a href="#">EPLAN, WSCAD, Zuken E3.S</a>                                |
| User Documentation                          | <a href="#">Beipackzettel / Package Insert – multilingual</a>           |

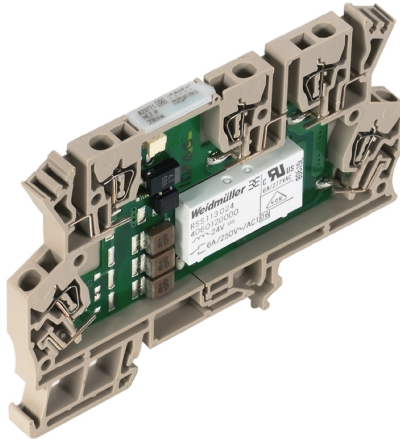
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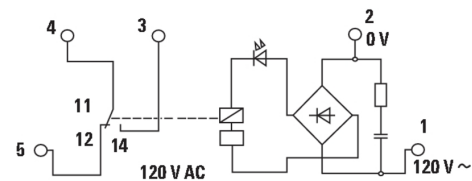
## Drawings

### Product image

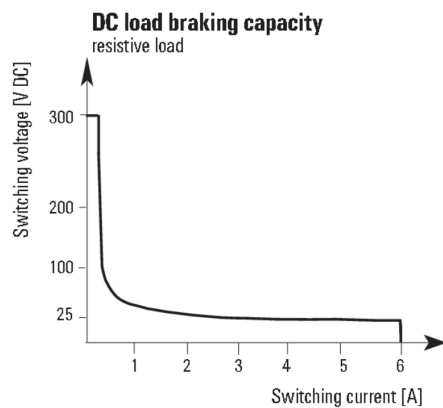


Similar to illustration

### Wiring diagram

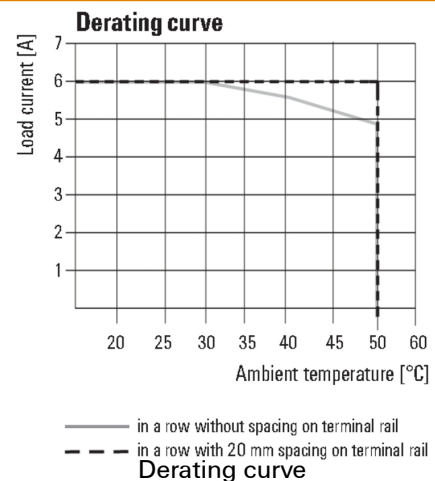


### Graph



DC load limit curve

### Graph



### Dimensional drawing

