

## TOZ 5VDC 230VAC1A

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

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

### Product image



Similar to illustration

- 1 NO contact
- Type: Triac (zero-cross switch), MOS-FET, Bipolar transistor
- 2 A DC, 0,1 A DC, 1 A AC output current
- Input voltages 5 V DC and 12 V DC with coloured marking: DC: blue

### General ordering data

|            |   |
|------------|---|
| Version    | TERMSERIES, Solid-state relay, Rated control voltage: 5 V DC $\pm 20\%$ , Rated switching voltage: 24...240 V AC, Continuous current: 1 A, Tension-clamp connection |
| Order No.  | <a href="#">1127510000</a>  |
| Type       | TOZ 5VDC 230VAC1A   |
| GTIN (EAN) | 4032248908974   |
| Qty.       | 10 items  |

## TOZ 5VDC 230VAC1A

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E141197

## Dimensions and weights

|            |         |                 |             |
|------------|---------|-----------------|-------------|
| Depth      | 87.8 mm | Depth (inches)  | 3.4567 inch |
| Height     | 90.5 mm | Height (inches) | 3.563 inch  |
| Width      | 6.4 mm  | Width (inches)  | 0.252 inch  |
| Net weight | 29.1 g  |                 |             |

## Temperatures

|                       |                |                     |   |
|-----------------------|----------------|---------------------|---|
| Storage temperature   | -40 °C...70 °C | Ambient temperature | -20 °C...60 °C  |
| Operating temperature |                | Humidity            | 5-95% relative humidity,<br>Tu = 40°C, without condensation |

## Probability of failure

MTTF 1120 a

## Environmental Product Compliance

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| RoHS Compliance Status               | Compliant with exemption             |
| RoHS Exemption (if applicable/known) | 7a, 7cl                              |
| REACH SVHC                           | Lead 7439-92-1                       |
| SCIP                                 | 9e2cbc49-76d9-4611-b8ec-5b4f549a0aa9 |

## Rated data UL

|   |  |                                    |                            |
|---|--|------------------------------------|----------------------------|
| Ambient temperature (operational), max. 60 °C |  | Output current derating (ohmic)    | 1 A @ 25 °C, 0.3 A @ 60 °C |
| Connection cross-section AWG, min.            | AWG 26   | Connection cross-section AWG, max. | AWG 14                     |
| Type of conductor                             | rigid copper conductor,<br>flexible copper conductor | Pollution severity level           | 2                          |

## Control side

|  |   |                                       |                        |
|--|---|---------------------------------------|------------------------|
| Rated control voltage  | 5 V DC $\pm$ 20 %                                   | Nominal control current               | 15 mA DC ( $\pm$ 20 %) |
| Power rating   | 75 mW   | Status indicator                      | Green LED              |
| Protective circuit   | Free-wheeling diode,<br>Reverse polarity protection | Input frequency                       | 3 Hz                   |
| Coil voltage of the replacement relay deviating from the rated control voltage | No  | Coil voltage of the replacement relay | 5 V DC                 |

## Load side

|                           |               |                    |              |
|---------------------------|---------------|--------------------|--------------|
| Rated switching voltage   | 24...240 V AC | Continuous current | 1 A          |
| Rated switching current   | 1 A           | Inrush current     | 15 A / 10 ms |
| Switch-on delay           | <12 ms        | Switch-off delay   | <12 ms       |
| Voltage drop at max. load | $\leq$ 1.6 V  | Leakage current    | <1.5 mA      |

Creation date 01.03.2026 12:23:56 MEZ

Catalogue status / Drawings

## TOZ 5VDC 230VAC1A

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

|                                |            |   |  |
|--------------------------------|------------|---|--|
| Min. switching current         | 20 mA      | Short-circuit-proof                           | No                                       |
| Protective circuit, load side  | RC element | Contact type                                  | 1 NO contact (Triac (zero-cross switch)) |
| Output voltage frequency range | 50 / 60 Hz | max. switching frequency (DC control voltage) | 3 Hz                                     |

## General data

|                                    |                          |                |  |
|------------------------------------|--------------------------|----------------|--|
| Mounting rail                      | TS 35                    |                |  |
| Test button available              | No                       |                |  |
| Colour                             | black                    |                |  |
| UL94 flammability rating component | Component                | Housing        |  |
|                                    | UL94 flammability rating | V-0            |  |
|                                    | Component                | Retaining clip |  |
|                                    | UL94 flammability rating | V-0            |  |

## Insulation coordination

|  |                  |   |                  |
|--|------------------|---|------------------|
| Rated voltage                                    | 300 V            | Pollution severity  | 2                |
| Surge voltage category                           | III              | Clearance and creepage distances for control side - load side | ≥ 5.5 mm         |
| Dielectric strength for control side - load side | 2.5 kVeff        | Dielectric strength to mounting rail                          | 4 kVeff / 1 Min. |
| Impulse withstand voltage                        | 6 kV (1.2/50 µs) | Protection degree   | IP20             |

## Further details of approvals / standards

|                       |            |                         |         |
|-----------------------|------------|-------------------------|---------|
| Certificate No. (DNV) | TAA00001E5 | Certificate no. (cULus) | 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.  | 0.14 mm <sup>2</sup> |
| Clamping range, max.  | 2.5 mm <sup>2</sup>      | Wire connection cross section AWG, min.   | AWG 26               |
| Wire connection cross section AWG, max.   | AWG 14                   | Wire cross-section, solid, min.   | 0.14 mm <sup>2</sup> |
| Wire cross-section, solid, max.   | 2.5 mm <sup>2</sup>      | Wire cross-section, solid, min. (AWG)   | AWG 26               |
| Wire cross-section, solid, max. (AWG)   | AWG 14                   | Wire connection cross section, finely stranded, min.                                    | 0.14 mm <sup>2</sup> |
| Wire connection cross section, finely stranded, max.                                    | 2.5 mm <sup>2</sup>      | Wire cross-section, finely stranded, min. (AWG)   | AWG 26               |
| Wire cross-section, finely stranded, max. (AWG)   | AWG 14                   | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.14 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.                              | 0.14 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 8.0    | EC001504    | ETIM 9.0    | EC001504    |
| ETIM 10.0   | EC001504    | ECLASS 14.0 | 27-37-16-04 |
| ECLASS 15.0 | 27-37-16-04 |             |             |

Drawings

Wiring diagram



Graph



Derating curve

Dimensional drawing



Graph



Shown at an example with resistive load.  
 1. Switches on at first zero cross of mains voltage while control input gets signal.  
 2. Switches off at next zero cross of mains current after control input signal was switched off.  
 Switching DC voltages is not possible with this solid-state relays.

Miscellaneous

**Type code TERMSERIES solid-state relay versions**



Type codes