

TERMSERIES
TOZ 24VDC 24VDC2A

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com



TERMSERIES complete solid-state relay modules 3 to 33 V DC 2 A output versions consisting of a solid-state relay and a base with AC/DC/UC input; available in different designs:

- With tension-clamp connection
- In 6.4 mm width
- Optionally with multiple-voltage input: 24 to 230 V UC
- With various protective circuits in the input (free-wheel diode, RC element)
- Illuminated ejection lever

General ordering data

| | |
|------------|---|
| Type | TOZ 24VDC 24VDC2A |
| Order No. | 1127290000 |
| Version | TERMSERIES, solid-state relays, 1 NO contact (MOS-FET), Rated control voltage: 24 V DC $\pm 20\%$, Rated switching voltage: 3...33 V DC, Continuous current: 2 A, Tension clamp connection |
| GTIN (EAN) | 4032248908875 |
| Qty. | 10 pc(s). |

TERMSERIES
TOZ 24VDC 24VDC2A

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Dimensions and weights**

| | | | |
|------------|---------|-----------------|------------|
| Width | 6.4 mm | Width (inches) | 0.252 inch |
| Height | 90.5 mm | Height (inches) | 3.563 inch |
| Depth | 87.8 mm | Depth (inches) | 3.457 inch |
| Net weight | 29.3 g | | |

Temperatures

| | | | |
|-----------------------------|---|-----------------------------|----------------|
| Humidity | 5–95% rel. humidity, $T_u = 40^\circ\text{C}$, no condensation | Operating temperature, max. | 60 °C |
| Operating temperature, min. | -20 °C | Storage temperature, max. | 70 °C |
| Storage temperature, min. | -40 °C | Operating temperature | -20 °C...60 °C |
| Storage temperature | -40 °C...70 °C | | |

Probability of failure

| | |
|------|-------------|
| MTTF | 1,077 Years |
|------|-------------|

Control side

| | | | |
|---------------------------------------|---|--|---------------------------|
| Rated control voltage | 24 V DC $\pm 20\%$ | Nominal control current | 11.5 mA DC ($\pm 20\%$) |
| Power rating | 0.29 W | Cut-in / dropout voltage | 14 V / 12.5 V DC |
| Cut-in / dropout current | 6.2 mA / 5.4 mA DC | Status indicator | Green LED |
| Protective circuit | Free-wheel diode, Reverse polarity protection | Coil voltage of the replacement relay deviating from the rated control voltage | No |
| Coil voltage of the replacement relay | 24 V DC | | |

Load side

| | | | |
|-------------------------------|------------------|---|--------------------|
| Rated switching voltage | 3...33 V DC | Continuous current | 2 A |
| Rated switching current | 2 A | Inrush current | 15 A / 10 ms |
| Switch-on delay | $\leq 0,1$ ms | Switch-off delay | < 1 ms |
| Voltage drop at max. load | ≤ 120 mV | Leakage current | < 10 μA |
| Min. switching current | 5 mA | Short-circuit-proof | No |
| Protective circuit, load side | Free-wheel diode | max. switching frequency (DC control voltage) | 300 Hz |

Contact data

| | |
|--------------|------------------------|
| Contact type | 1 NO contact (MOS-FET) |
|--------------|------------------------|

General data

| | | | |
|---------------|-------|---------------------------|-----|
| Mounting rail | TS 35 | UL 94 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 kV _{eff} | Dielectric strength to mounting rail | 4 kV _{eff} / 1 min. |
| Impulse withstand voltage | 6 kV (1.2/50 μs) | Protection degree | IP20 |

TERMSERIES
TOZ 24VDC 24VDC2A

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Technical data**Further details of approvals / standards**

| | | | |
|-----------|--------------|-------------------------|---------|
| Standards | DIN EN 50178 | 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 ² | Clamping range, min. | 0.14 mm ² |
| Clamping range, max. | 2.5 mm ² | Wire connection cross section AWG, min. | AWG 26 |
| Wire connection cross section AWG, max. | AWG 14 | Wire cross-section, solid, min. | 0.14 mm ² |
| Wire cross-section, solid, max. | 2.5 mm ² | Wire connection cross-section, finely stranded, min. | 0.14 mm ² |
| Wire connection cross section, finely stranded, max. | 2.5 mm ² | 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 ² |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 1.5 mm ² | Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 0.14 mm ² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 1.5 mm ² | Twin wire-end ferrules, min. | 0.5 mm ² |
| Twin wire-end ferrules, max. | 1 mm ² | Blade size | 0.6 x 3.5 mm |
| Gauge to IEC 60947-1 | A1, B1 | | |

Rated data UL

| | | |
|---|------------------------------------|---|
| Ambient temperature (operational), max. 60 °C | Connection cross-section AWG, min. | AWG 26 |
| Connection cross-section AWG, max. | Type of conductor | rigid copper conductor, flexible copper conductor |
| Pollution severity level | | 2 |

Classifications

| | | | |
|------------|-------------|------------|-------------|
| ETIM 4.0 | EC001504 | ETIM 5.0 | EC001504 |
| ETIM 6.0 | EC001504 | eClass 6.2 | 27-27-09-90 |
| eClass 7.1 | 27-27-09-90 | eClass 8.1 | 27-27-09-90 |
| eClass 9.0 | 27-27-09-90 | eClass 9.1 | 27-37-16-04 |

Product information

| | |
|---------------------------------|---|
| Descriptive text ordering data | Spare solid-state relay Type: SSS 24 V/24 V 2 A DC Orderno.: 4061190000 |
| Descriptive text technical data | Accessories and dimensional drawings: refer to the TERMSERIES Accessories page. |

Approvals

Approvals



ROHS Conform

Creation date April 13, 2018 10:25:12 PM CEST

Catalogue status 06.04.2018 / We reserve the right to make technical changes.

3

Data sheet**TERMSERIES**
TOZ 24VDC 24VDC2A**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com**Technical data****Downloads**

| | |
|---|---|
| Approval/Certificate/Document of Conformity | DE_PA_5600_160229_002.pdf |
| Brochure/Catalogue | CAT 4.2 ELECTR 15/16 EN |
| Engineering Data | EPLAN, WSCAD, Zuken E3.S |
| User Documentation | Operating Instructions |

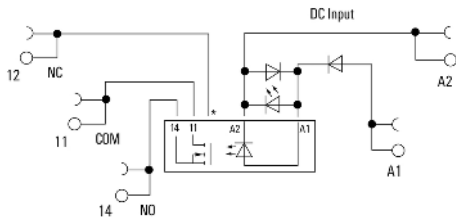
Data sheet

**TERMSERIES
TOZ 24VDC 24VDC2A**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

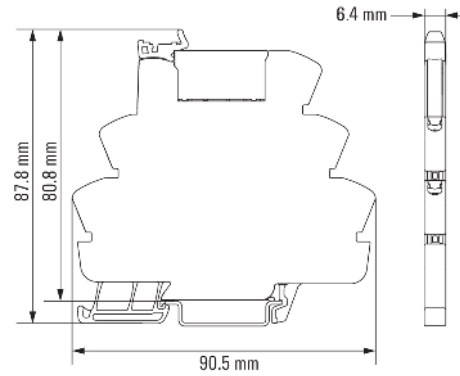
Drawings

Wiring diagram



*Contact is assembled in socket but not used with solid-state relays

Dimensional drawing

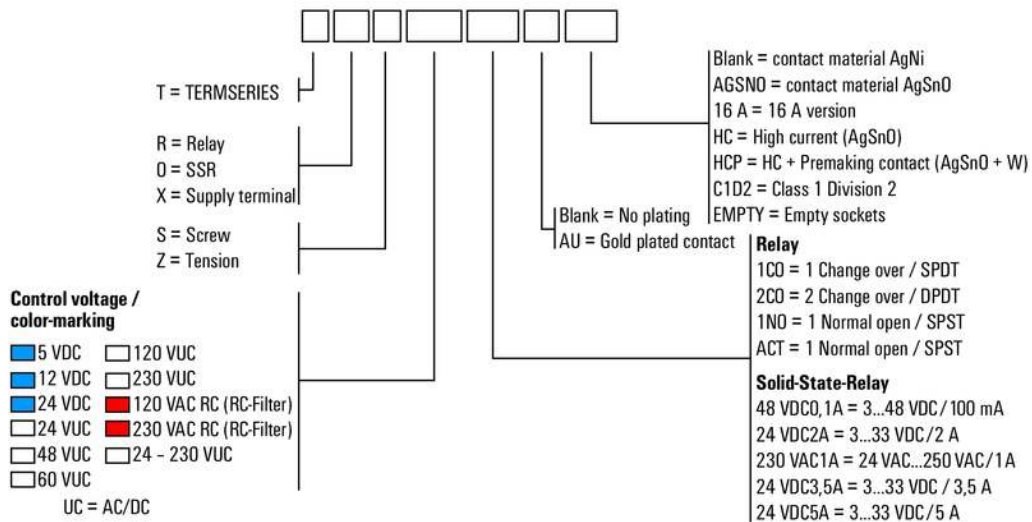


**TERMSERIES
TOZ 24VDC 24VDC2A**

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 16
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Drawings

Miscellaneous



Type codes