

**TERMSERIES**  
**TOS 24VUC 24VDC2A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

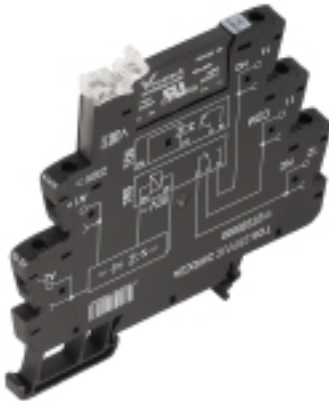
D-32758 Detmold

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**Product image**

Similar to illustration

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 screw 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       | TOS 24VUC 24VDC2A                                                                                                                                                                   |
| Order No.  | <a href="#">1127180000</a>                                                                                                                                                          |
| Version    | TERMSERIES, solid-state relays, 1 NO contact (MOS-FET), Rated control voltage: 24 V UC $\pm 10\%$ , Rated switching voltage: 3...33 V DC, Continuous current: 2 A, Screw connection |
| GTIN (EAN) | 4032248908837                                                                                                                                                                       |
| Qty.       | 10 pc(s).                                                                                                                                                                           |

Creation date August 18, 2020 1:09:51 AM CEST

Catalogue status 14.08.2020 / We reserve the right to make technical changes.

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

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Width      | 6.4 mm  | Width (inches)  | 0.252 inch |
| Height     | 89.6 mm | Height (inches) | 3.528 inch |
| Depth      | 87.8 mm | Depth (inches)  | 3.457 inch |
| Net weight | 32.4 g  |                 |            |

**Temperatures**

|                             |                                                                                |                             |                |
|-----------------------------|--------------------------------------------------------------------------------|-----------------------------|----------------|
| Humidity                    | 5-95% relative humidity,<br>$T_u = 40^\circ\text{C}$ , without<br>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 | 976 Years |
|------|-----------|

**Environmental Product Compliance**

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

**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,<br>flexible copper conductor |
| AWG 14                                        | Pollution severity level           | 2                                                    |
| Tightening torque, max.                       |                                    |                                                      |
| 0.4 Nm                                        |                                    |                                                      |

**Control side**

|                                                                                   |                    |                                       |                                                 |
|-----------------------------------------------------------------------------------|--------------------|---------------------------------------|-------------------------------------------------|
| Rated control voltage                                                             | 24 V UC $\pm 10\%$ | Nominal control current               | 10 mA AC $\pm 20\%$ ,<br>6 mA DC ( $\pm 20\%$ ) |
| Power rating                                                                      | 154 mW             | Cut-in / dropout voltage              | 18 V / 12 V AC<br>14 V / 13 V DC                |
| Status indicator                                                                  | Green LED          | Protective circuit                    | Rectifier                                       |
| Coil voltage of the replacement relay<br>deviating from the rated control voltage | Yes                | Coil voltage of the replacement relay | 24 V DC                                         |

**Load side**

|                                                  |                    |                                                  |                      |
|--------------------------------------------------|--------------------|--------------------------------------------------|----------------------|
| Rated switching voltage                          | 3...33 V DC        | Continuous current                               | 2 A                  |
| Inrush current                                   | 15 A / 10 ms       | Switch-on delay                                  | < 6.5 ms             |
| Switch-off delay                                 | < 10 ms            | Voltage drop at max. load                        | $\leq 120\text{ mV}$ |
| Leakage current                                  | < 10 $\mu\text{A}$ | Min. switching current                           | 5 mA                 |
| Short-circuit-proof                              | No                 | Protective circuit, load side                    | Free-wheeling diode  |
| max. switching frequency (AC control<br>voltage) | 3 Hz               | max. switching frequency (DC control<br>voltage) | 10 Hz                |

**Contact data**

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

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**Technical data****General data**

|                           |       |        |       |
|---------------------------|-------|--------|-------|
| Rail                      | TS 35 | Colour | black |
| 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 <sub>eff</sub> | Dielectric strength to mounting rail                          | 4 kV <sub>eff</sub> / 1 Min. |
| Impulse withstand voltage                        | 6 kV (1.2/50 µs)      | Protection degree                                             | IP20                         |

**Further details of approvals / standards**

|                         |              |                         |            |
|-------------------------|--------------|-------------------------|------------|
| Standards               | DIN EN 50178 | Certificate No. (DNVGL) | TAA00001E5 |
| Certificate no. (cULus) | E141197      |                         |            |

**Connection data**

|                                                                                         |                      |                                                                                         |                     |
|-----------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------|---------------------|
| Wire connection method                                                                  | Screw connection     | Stripping length, rated connection                                                      | 8 mm                |
| Tightening torque, max.                                                                 | 0.4 Nm               | 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 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. | 0.25 mm <sup>2</sup> | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm <sup>2</sup> |
| Conductor cross-section, flexible, AEH (DIN 46228-1), min.                              | 0.25 mm <sup>2</sup> | Conductor cross-section, flexible, AEH (DIN 46228-1), max.                              | 2.5 mm <sup>2</sup> |
| Wire connection cross section, finely stranded, two clampable wires, min.               | 0.5 mm <sup>2</sup>  | Wire cross-section, finely stranded, two clampable wires, max.                          | 1 mm <sup>2</sup>   |
| Twin wire-end ferrules, min.                                                            | 0.5 mm <sup>2</sup>  | Twin wire-end ferrules, max.                                                            | 1 mm <sup>2</sup>   |
| Blade size                                                                              | size PHO             | Gauge to IEC 60947-1                                                                    | A1, B1              |

**Classifications**

|             |             |            |             |
|-------------|-------------|------------|-------------|
| ETIM 6.0    | EC001504    | ETIM 7.0   | EC001504    |
| eClass 9.0  | 27-37-16-04 | eClass 9.1 | 27-37-16-04 |
| eClass 10.0 | 27-37-16-04 |            |             |

**Approvals**

Approvals



ROHS

Conform

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## Technical data

### Downloads

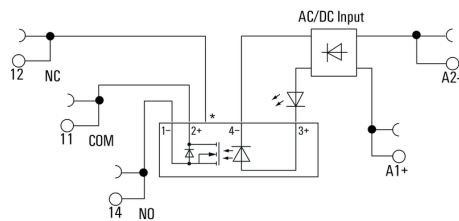
|                                             |                                                                         |
|---------------------------------------------|-------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a> |
| Brochure/Catalogue                          | <a href="#">CAT 4.2 ELECTR 18/19 EN</a>                                 |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>                                            |
| Engineering Data                            | <a href="#">STEP</a>                                                    |
| User Documentation                          | <a href="#">Beipackzettel / Package Insert – multilingual</a>           |

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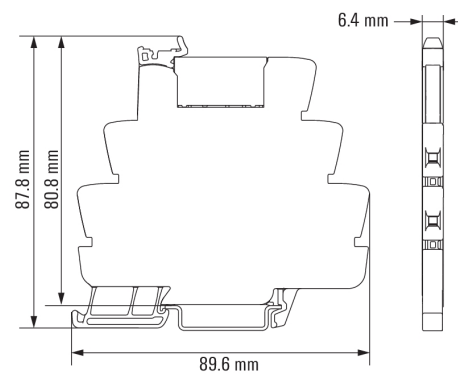
## Drawings

### Wiring diagram



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

### Dimensional drawing



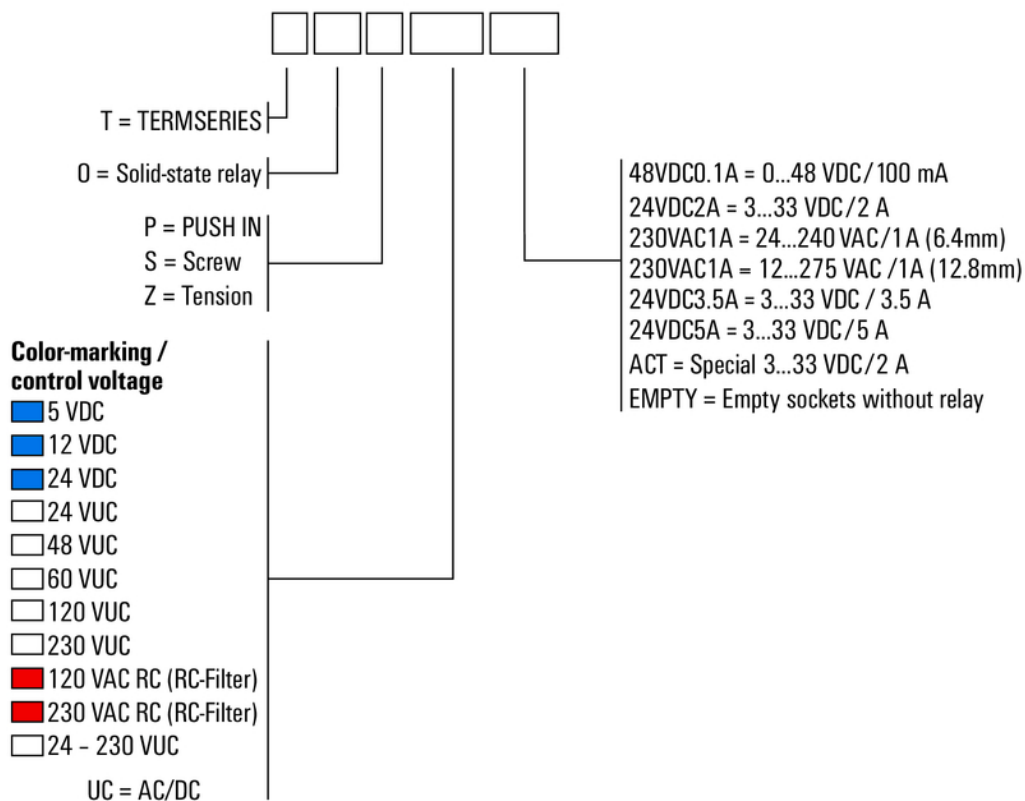
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## Drawings

### Miscellaneous

### Type code TERMSERIES solid-state relay versions



Type codes