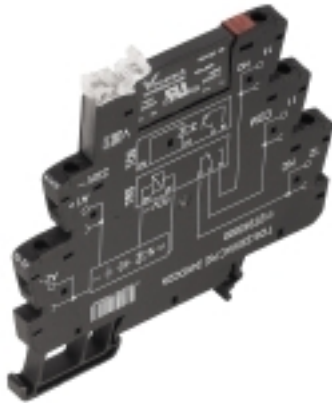


## TERMSERIES TOS 120VAC RC 48VDC0,1A

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



Similar to illustration

TERMSERIES complete solid-state relay modules 3 to 48 V DC 0.1 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 120VAC RC 48VDC0,1A  |
| Order No.  | <a href="#">1127000000</a>   |
| Version    | TERMSERIES, solid-state relays, 1 NO contact (Bipolar transistor), Rated control voltage: 120 V AC $\pm 10\%$ , Rated switching voltage: 0...48 V DC, Continuous current: 100 mA, Screw connection |
| GTIN (EAN) | 4032248908691  |
| Qty.       | 10 pc(s).  |

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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 <sub>u</sub> = 40°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 | 1,079 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.      | AWG 14 | Type of conductor                  | rigid copper conductor,<br>flexible copper conductor |
| Tightening torque, max.                 | 0.4 Nm | Pollution severity level           | 2  |

**Control side**

|                                       |                 |   |                       |
|---------------------------------------|-----------------|---|-----------------------|
| Rated control voltage                 | 120 V AC ± 10 % | Nominal control current   | 7 mA AC (±20 %)       |
| Power rating                          | 0.84 VA         | Cut-in / dropout voltage  | 79 V / 60 V AC        |
| Status indicator                      | Green LED       | Protective circuit  | Rectifier, RC element |
| RC filter                             | 94 Ω / 100 nF   | Coil voltage of the replacement relay<br>deviating from the rated control voltage | Yes                   |
| Coil voltage of the replacement relay | 60 V DC         |   |                       |

**Load side**

|  |             |                               |                     |
|--|-------------|-------------------------------|---------------------|
| Rated switching voltage                          | 0...48 V DC | Continuous current            | 100 mA              |
| Rated switching current                          | 100 mA      | Switch-on delay               | < 6.5 ms            |
| Switch-off delay                                 | < 10 ms     | Voltage drop at max. load     | ≤ 1 V               |
| Leakage current                                  | < 10 μA     | Min. switching current        | 500 μA              |
| Short-circuit-proof                              | No          | Protective circuit, load side | Free-wheeling diode |
| max. switching frequency (AC control<br>voltage) | 3 Hz        |                               |                     |

**Contact data**

|              |                                      |
|--------------|--------------------------------------|
| Contact type | 1 NO contact (Bipolar<br>transistor) |
|--------------|--------------------------------------|

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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. (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 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 | 27-37-16-04 | eClass 9.1 | 27-37-16-04 |

**Approvals**

Approvals



ROHS Conform

**Data sheet****TERMSERIES**  
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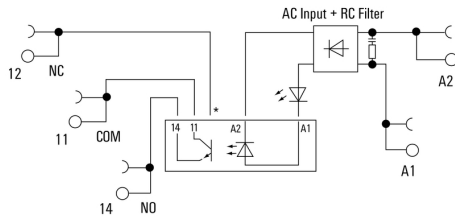
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|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">DE_PA_5600_160229_002.pdf</a> |
| Brochure/Catalogue                          | <a href="#">CAT 4.2 ELECTR 18/19 EN</a>   |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>              |
| Engineering Data                            | <a href="#">STEP</a>                      |
| User Documentation                          | <a href="#">Operating Instructions</a>    |

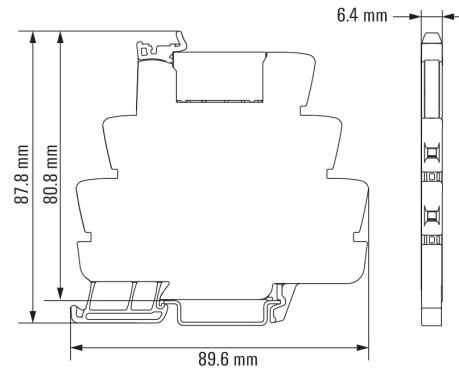
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**Drawings****Wiring diagram**

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

**Dimensional drawing**

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**Drawings**

**Miscellaneous**



Type codes