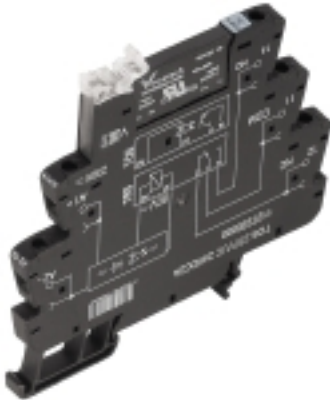


TERMSERIES TOS 24-230VUC 230VAC1A

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



TERMSERIES complete solid-state relay modules 24 to 230 V AC 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 24-230VUC 230VAC1A |
| Order No. | 1127500000 |
| Version | TERMSERIES, solid-state relays, 1 NO contact (Triac (zero-cross switch)), Rated control voltage: 24...230 V UC $\pm 10\%$, Rated switching voltage: 24...240 V AC, Continuous current: 1 A, Screw connection |
| GTIN (EAN) | 4032248909056 |
| 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 | 34 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 | 803 Years |
|------|-----------|

Control side

| | | | |
|---------------------------------------|---|--|--|
| Rated control voltage | 24...230 V UC $\pm 10\%$ | Nominal control current | 22 mA @ 24 V DC, 4 mA @ 230 V AC |
| Power rating | 530 mW @ 24 V DC, 930 mVA @ 230 V AC | Cut-in / dropout voltage | 10.5 V / 7.7 V AC 11.5 V / 6.5 V DC |
| Cut-in / dropout current | 20.5 mA / 14 mA AC 20 mA / 9 mA DC | Status indicator | Green LED |
| Protective circuit | Rectifier | Coil voltage of the replacement relay deviating from the rated control voltage | Yes |
| Coil voltage of the replacement relay | 24 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 | < 20 ms | Switch-off delay | < 125 ms |
| Voltage drop at max. load | ≤ 1 V | Leakage current | < 1.5 mA |
| Min. switching current | 20 mA | Short-circuit-proof | No |
| Protective circuit, load side | RC element | Output voltage frequency range | 50 / 60 Hz |
| max. switching frequency (AC control voltage) | 3 Hz | max. switching frequency (DC control voltage) | 3 Hz |

Contact data

| | |
|--------------|--|
| Contact type | 1 NO contact (Triac (zero-cross switch)) |
|--------------|--|

General data

| | | | |
|---------------------------|-------|--------|-------|
| Mounting rail | TS 35 | Colour | Black |
| UL 94 flammability rating | V-0 | | |

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Technical data**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 |

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 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. | 0.25 mm ² | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm ² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 0.25 mm ² | Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 2.5 mm ² |
| Wire connection cross section, finely stranded, two clampable wires, min. | 0.5 mm ² | Wire cross-section, finely stranded, two clampable wires, max. | 1 mm ² |
| Twin wire-end ferrules, min. | 0.5 mm ² | Twin wire-end ferrules, max. | 1 mm ² |
| Blade size | size PHO | Gauge to IEC 60947-1 | A1, B1 |

Rated data UL

| | | |
|---|------------------------------------|---|
| Ambient temperature (operational), max. 40 °C | Connection cross-section AWG, min. | AWG 26 |
| Connection cross-section AWG, max. | Type of conductor | rigid copper conductor, flexible copper conductor |
| Tightening torque, max. | 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/230 V 1 A AC Orderno.: 4061210000 |
| Descriptive text technical data | Accessories and dimensional drawings: refer to the TERMSERIES Accessories page. |

Data sheet**TERMSERIES
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Approvals



ROHS

Conform

Downloads

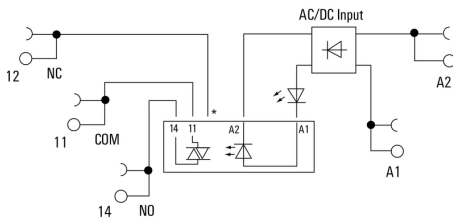
| | |
|---|---|
| Approval/Certificate/Document of Conformity | DE_PA_5600_160229_002.pdf |
| Brochure/Catalogue | CAT 4.2 ELECTR 18/19 EN |
| Engineering Data | EPLAN_WSCAD |
| Engineering Data | STEP |
| User Documentation | Operating Instructions |

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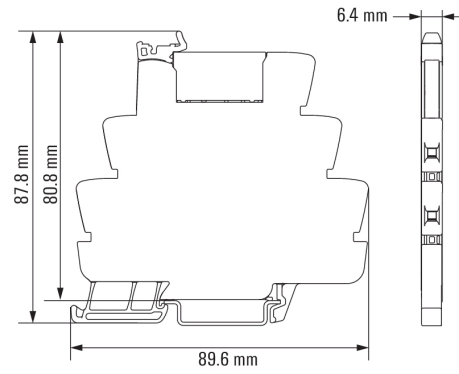
Drawings

Wiring diagram



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

Dimensional drawing



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Drawings

Miscellaneous



Type codes