

TOS 5VDC 24VDC2A

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

www.weidmueller.com

Product image



Similar to illustration

- 1 NO contact (MOS-FET)
- 6.4 mm wide
- 2 A DC output current
- Unique multi-voltage input from 24 to 230 V UC
- Input voltages from 12 V DC to 230 V UC with coloured marking: AC: red, DC: blue, UC: white

General ordering data

| | |
|------------|---|
| Version | TERMSERIES, Solid-state relay, Rated control voltage: 5 V DC $\pm 20\%$, Rated switching voltage: 3...33 V DC, Continuous current: 2 A, Screw connection |
| Order No. | 1127140000 |
| Type | TOS 5VDC 24VDC2A |
| GTIN (EAN) | 4032248908509 |
| Qty. | 10 items |

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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 | 89.6 mm | Height (inches) | 3.5276 inch |
| Width | 6.4 mm | Width (inches) | 0.252 inch |
| Net weight | 32.4 g | | |

Temperatures

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

Probability of failure

MTTF 1079 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 | Connection cross-section AWG, min. | AWG 26 |
| Connection cross-section AWG, max. | AWG 14 | Type of conductor | rigid copper conductor, flexible copper conductor |
| Tightening torque, max. | 0.4 Nm | Pollution severity level | 2 |

Control side

| | | | |
|---|---|---------------------------------------|-------------------------|
| Rated control voltage | 5 V DC \pm 20 % | Nominal control current | 11.5 mA DC (\pm 20%) |
| Power rating | 50 mW | Status indicator | Green LED |
| Protective circuit | Free-wheeling diode, Reverse polarity protection | Input frequency | 300 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 | 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 | \leq 120 mV | Leakage current | <10 μ A |

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| Min. switching current | 5 mA | Short-circuit-proof | No |
| Protective circuit, load side | Free-wheeling diode | Contact type | 1 NO contact (MOS-FET) |
| max. switching frequency (DC control voltage) | 300 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 | 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 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 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 |
| Blade size | size PH0 | | |

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 | | |

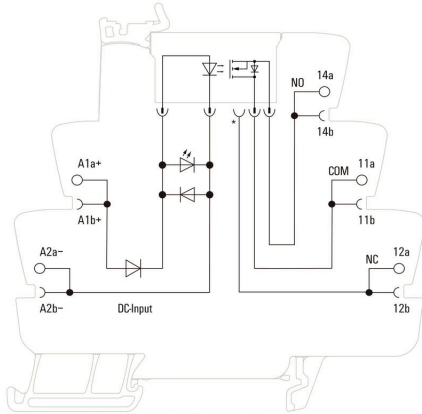
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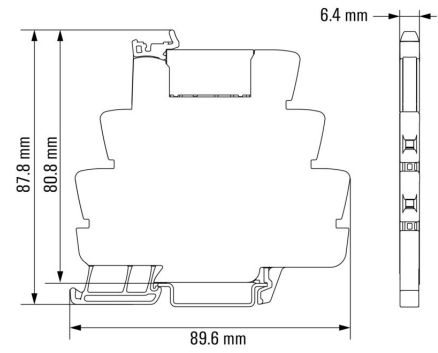
Drawings

Wiring diagram



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

Dimensional drawing



Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes