

TRS 24VDC ACT**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

General ordering data

| | |
|------------|--|
| Version | TERMSERIES, Relay module, Number of contacts: 1, NO contact AgNi, Rated control voltage: 24 V DC $\pm 20\%$, Continuous current: 6 A, Screw connection, Test button available: No |
| Order No. | 138190000 |
| Type | TRS 24VDC ACT |
| GTIN (EAN) | 4050118183962 |
| Qty. | 10 pc(s). |

Creation date November 26, 2024 12:21:34 PM CET

Catalogue status 26.11.2024 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

| | | | |
|------------|---------|-----------------|------------|
| Depth | 87.8 mm | Depth (inches) | 3.457 inch |
| Height | 89.6 mm | Height (inches) | 3.528 inch |
| Width | 6.4 mm | Width (inches) | 0.252 inch |
| Net weight | 32.7 g | | |

Temperatures

| | | | |
|---------------------|--|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -40 °C...60 °C |
| Humidity | 5-95% relative humidity, T _u = 40°C, without condensation | | |

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 | 24 V DC ±20 % | Rated current DC | 11.5 mA |
| Power rating | 280 mW | Status indicator | Green LED |
| Protective circuit | Free-wheeling 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 | 250 V AC | Continuous current | 6 A |
| Max. switching frequency at rated load | 0.1 Hz | Max. switching voltage, AC | 250 V |
| Max. switching voltage, DC | 250 V | Inrush current | 20 A / 20 ms |
| AC switching capacity (resistive), max. | 1500 VA | DC switching capacity (resistive), max. | 144 W @ 24 V |
| Switch-on delay | ≤ 6 ms | Switch-off delay | ≤ 16 ms |
| Contact type | 1 NO contact (AgNi) | Mechanical service life | 5 x 10 ⁶ switching cycles |
| Min. switching power | 1 mA @ 24 V, 10 mA @ 12 V, 100 mA @ 5 V | | |

General data

| | | |
|--------------------------------------|---------------------------|----------------|
| Operating altitude | ≤ 2000 m, above sea level | |
| Version | Actuator version | |
| Rail | TS 35 | |
| Test button available | No | |
| Mechanical switch position indicator | No | |
| Colour | black | |
| UL94 flammability rating component | Component | Housing |
| | UL94 flammability rating | V-0 |
| | Component | Retaining clip |
| | UL94 flammability rating | V-0 |

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Insulation coordination

| | | | |
|--|------------------------------|---|------------------------------|
| Rated voltage | 300 V | Pollution severity | 2 |
| Surge voltage category | III | Clearance and creepage distances for control side - load side | ≥ 6 mm |
| Dielectric strength for control side - load side | 4 kV _{eff} / 1 Min. | Type of isolation at input and output | reinforced insulation |
| Dielectric strength of open contact | 1 kV _{eff} / 1 min | 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

| | | | |
|-----------------------|------------|-------------------------|---------|
| 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 16 |
| 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. | 1.5 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 PHO | | |

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC001437 | ETIM 7.0 | EC001437 |
| ETIM 8.0 | EC001437 | ETIM 9.0 | EC001437 |
| ECLASS 9.0 | 27-37-16-01 | ECLASS 9.1 | 27-37-16-01 |
| ECLASS 10.0 | 27-37-16-01 | ECLASS 11.0 | 27-37-16-01 |
| ECLASS 12.0 | 27-37-16-01 | ECLASS 13.0 | 27-37-16-01 |
| ECLASS 14.0 | 27-37-16-01 | | |

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 |

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Technical data

Approvals

Approvals



| | |
|-------------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate no. (cULus) | E141197 |

Downloads

| | |
|---|---|
| Approval/Certificate/Document of Conformity | EU Konformitätserklärung / EU Declaration of Conformity |
| Engineering Data | CAD data – STEP |
| Catalogues | Catalogues in PDF-format |
| Brochures | |

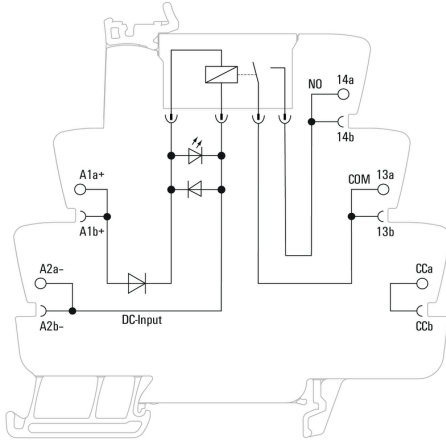
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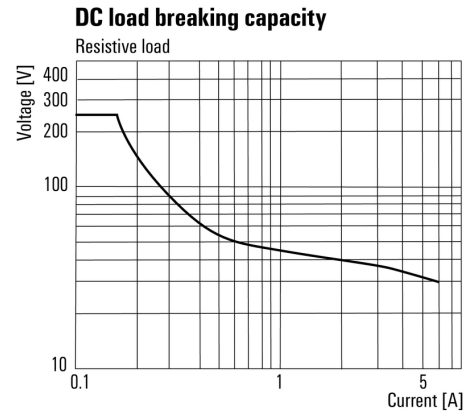
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Drawings

Wiring diagram

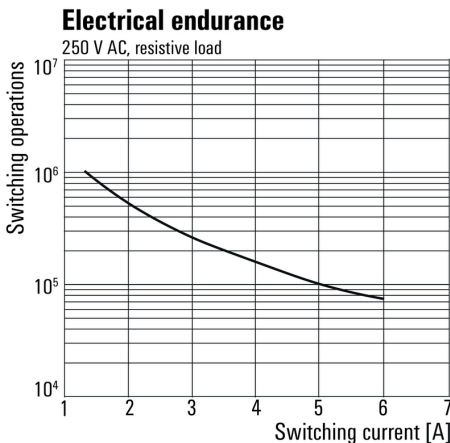


Graph



DC load limit curve

Graph



Electrical service life 230 V AC resistive load
 230 V AC resistive load

Dimensional drawing

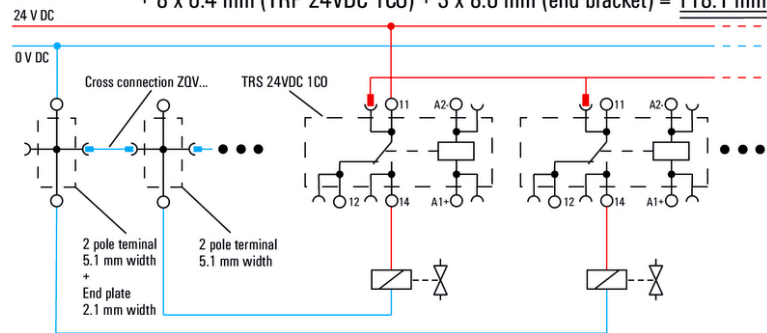


Drawings

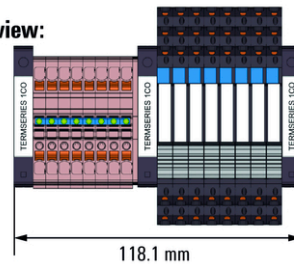
**Space requirement for an 8-channel system
 with a standard TERMSERIES1CO relay**

Example of output wiring to show the difference in 8 loads to be wired:

$$\text{Result width} = 8 \times 5.1 \text{ mm (2-pole terminal block)} + 1 \times 2.1 \text{ mm (end plate)} \\
 + 8 \times 6.4 \text{ mm (TRP 24VDC 1CO)} + 3 \times 8.0 \text{ mm (end bracket)} = \underline{\underline{118.1 \text{ mm}}}$$



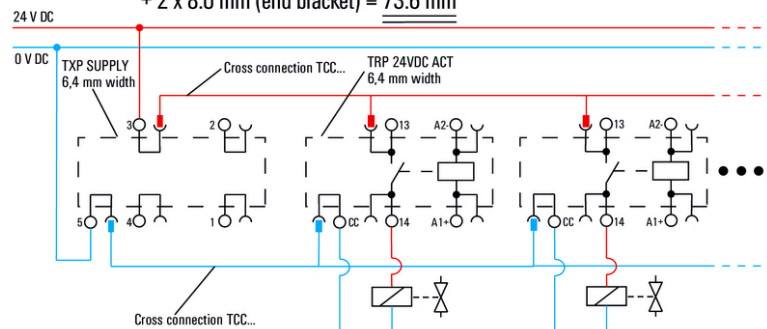
Space requirement top view:



**Space requirement for an 8-channel system
 with TERMSERIES ACT version relays and supply terminals**

Example of output wiring to show the difference in 8 loads to be wired:

$$\text{Result width} = 1 \times 6.4 \text{ mm (TRP SUPPLY)} + 8 \times 6.4 \text{ mm (TRP 24VDC ACT)} \\
 + 2 \times 8.0 \text{ mm (end bracket)} = \underline{\underline{73.6 \text{ mm}}}$$



Space requirement top view:

