

TRZ 24VDC ACT

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



Similar to illustration

- 1 NO contact
- Contact material: AgNi
- Wiring optimized 24 V DC actuator version: Bridgeable, potential-free connection in the output (CC)

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, Tension-clamp connection, Test button available: No
Order No.	1391670000
Type	TRZ 24VDC ACT
GTIN (EAN)	4050118192049
Qty.	10 pc(s).

Creation date October 3, 2022 6:41:38 PM CEST

Catalogue status 23.09.2022 / 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	90.5 mm	Height (inches)	3.563 inch
Width	6.4 mm	Width (inches)	0.252 inch
Net weight	30 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		

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1	SCIP	9e2cbc49-76d9-4611-b8ec-5b4f549a0aa9
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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
Pollution severity level	2		

Control side

Rated control voltage	24 V DC ±20 %	Rated current DC	11.5 mA
Power rating	280 mW	Pull-in/drop-out voltage, typ.	16 V / 3 V DC
Pull-in/drop-out current, typ.	7.5 mA / 1 mA DC	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, 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

Standards	IEC 61810-1	Certificate No. (DNVGL)	TAA00001E5
Certificate no. (cULus)	E141197		

Connection data

Wire connection method	Tension-clamp connection	Stripping length, rated connection	8 mm
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.	0.14 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.14 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm ²	Twin wire-end ferrules, min.	0.5 mm ²
Twin wire-end ferrules, max.	1 mm ²	Blade size	0.6 x 3.5 mm

Classifications

ETIM 6.0	EC001437	ETIM 7.0	EC001437
ETIM 8.0	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

Approvals

Approvals



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

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Technical data**Downloads**

Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD, Zuken E3.S
User Documentation	Beipackzettel / Package Insert – multilingual
Catalogues	Catalogues in PDF-format
Brochures	

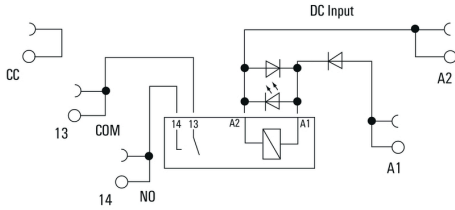
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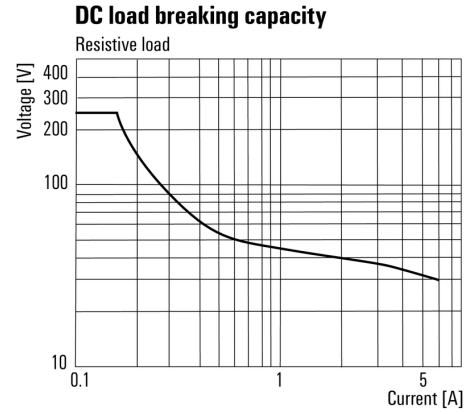
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Drawings

Wiring diagram

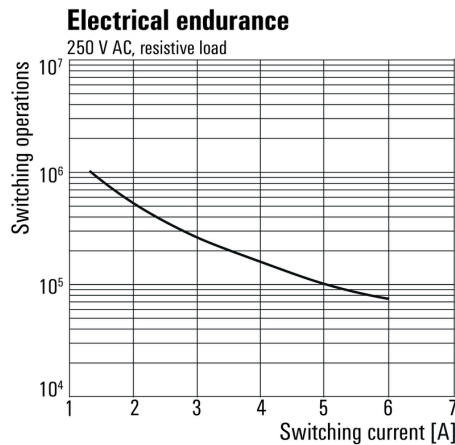


Graph



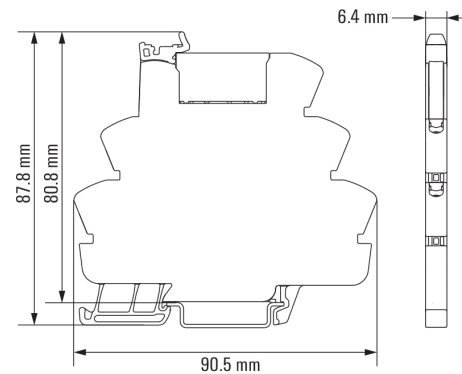
DC load limit curve

Graph



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

Dimensional drawing



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Drawings

Miscellaneous

Type code TERMSERIES electromechanical relay versions



Type codes

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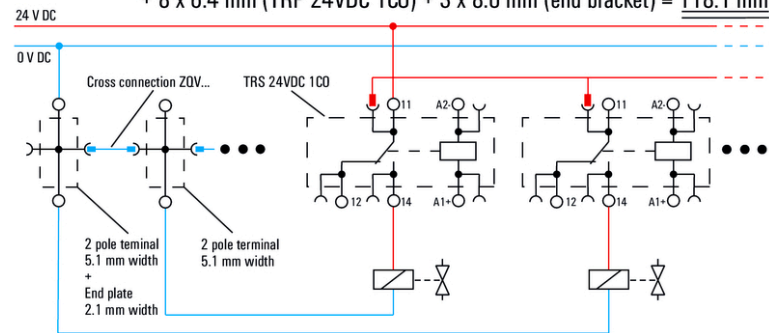
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Drawings

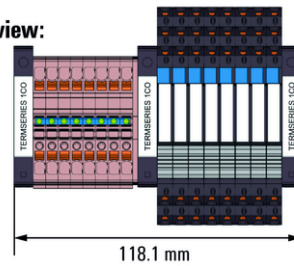
**Space requirement for an 8-channel system
 with a standard TERMSERIES1CO relay**

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

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



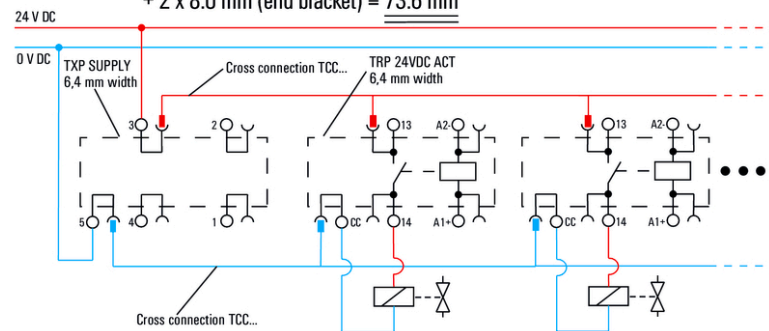
Space requirement top view:



**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:

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



Space requirement top view:

