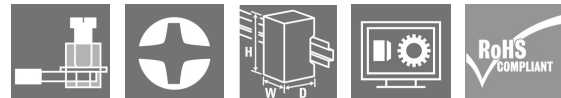
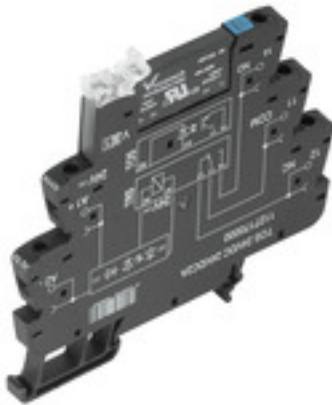


TOS 24VDC 230VAC1A**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Similar to illustration

- 1 NO contact (Triac (zero-cross switch))
- 6.4 mm wide
- 1 A AC 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: 24 V DC $\pm 20\%$, Rated switching voltage: 24...240 V AC, Continuous current: 1 A, Screw connection
Order No.	1127410000
Type	TOS 24VDC 230VAC1A
GTIN (EAN)	4032248908967
Qty.	10 pc(s).

TOS 24VDC 230VAC1A

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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	32.1 g		

Temperatures

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

Probability of failure

MTTF	1,120 a
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Rated data UL

Ambient temperature (operational), max.	60 °C	Output current derating (ohmic)	1 A @ 25 °C, 0.3 A @ 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 $\pm 20\%$	Nominal control current	11.5 mA DC ($\pm 10\%$)
Power rating	280 mW	Status indicator	Green LED
Protective circuit	Free-wheeling diode, Reverse polarity protection	Input frequency	3 Hz
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	24...240 V AC	Continuous current	1 A
Rated switching current	1 A	Inrush current	15 A / 10 ms
Switch-on delay	≤ 12 ms	Switch-off delay	≤ 12 ms
Voltage drop at max. load	≤ 1.6 V	Leakage current	< 1.5 mA
Min. switching current	20 mA	Short-circuit-proof	No
Protective circuit, load side	RC element	Contact type	1 NO contact (Triac (zero-cross switch))
Output voltage frequency range	50 / 60 Hz	max. switching frequency (DC control voltage)	3 Hz

General data

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

Creation date November 26, 2024 12:23:52 PM CET

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

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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	≥ 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

Certificate No. (DNV)	TAA00001E5	Certificate no. (cULus)	E141197
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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 PHO		

Classifications

ETIM 6.0	EC001504	ETIM 7.0	EC001504
ETIM 8.0	EC001504	ETIM 9.0	EC001504
ECLASS 9.0	27-37-16-04	ECLASS 9.1	27-37-16-04
ECLASS 10.0	27-37-16-04	ECLASS 11.0	27-37-16-04
ECLASS 12.0	27-37-16-04	ECLASS 13.0	27-37-16-04
ECLASS 14.0	27-37-16-04		

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

TOS 24VDC 230VAC1A**Weidmüller Interface GmbH & Co. KG**

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www.weidmueller.com**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
User Documentation	Beipackzettel / Package Insert – multilingual
Catalogues	Catalogues in PDF-format
Brochures	

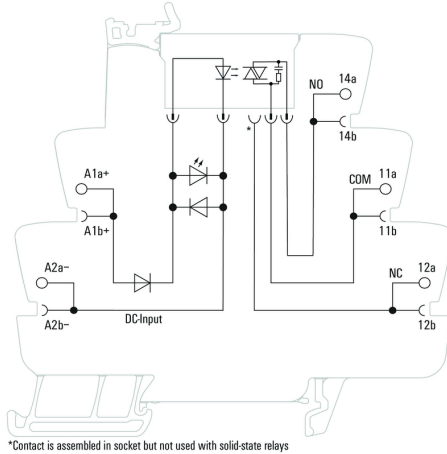
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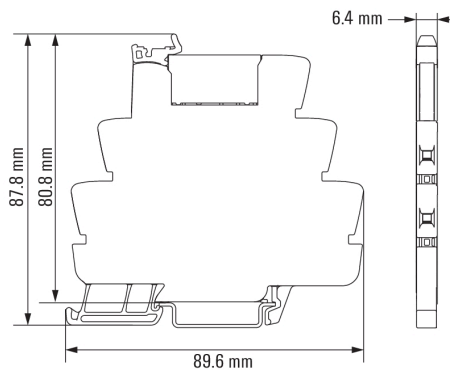
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Drawings

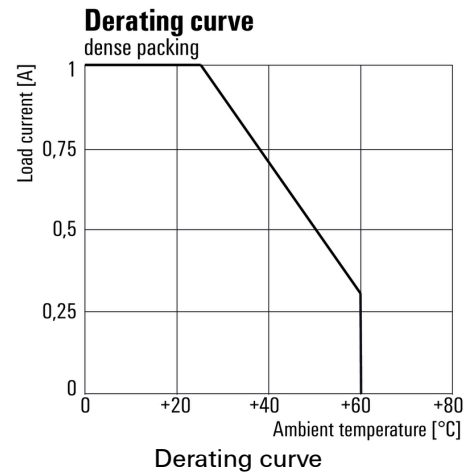
Wiring diagram



Dimensional drawing

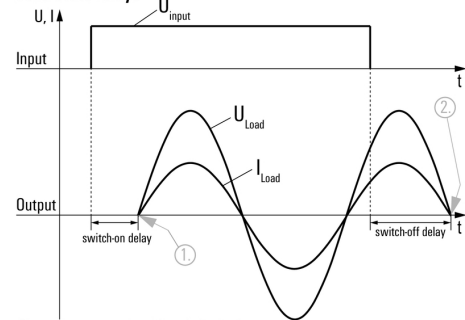


Graph



Graph

Signal characteristics of zero cross switching solid-state relays



Shown at an example with resistive load.

1. Switches on at first zero cross of mains voltage while control input gets signal.
2. Switches off at next zero cross of mains current after control input signal was switched off.

Switching DC voltages is not possible with this solid-state relays.

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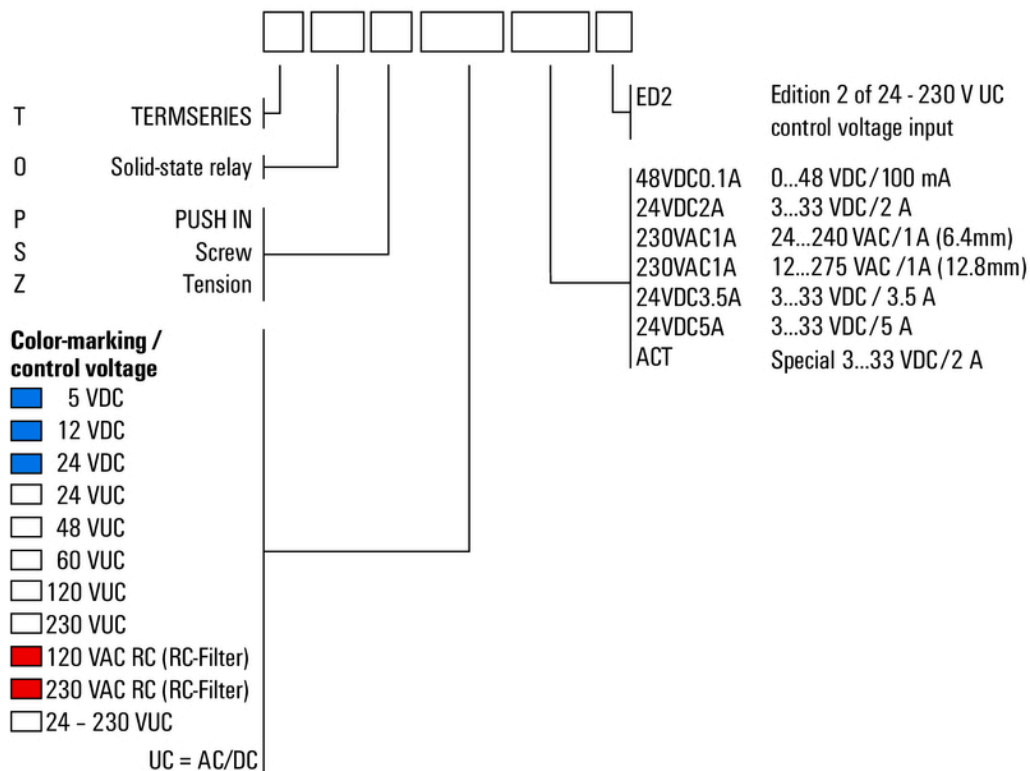
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Drawings

Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes