

## TOS 120VAC RC 230VAC1A

**Weidmüller Interface GmbH & Co. KG**

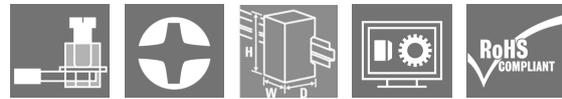
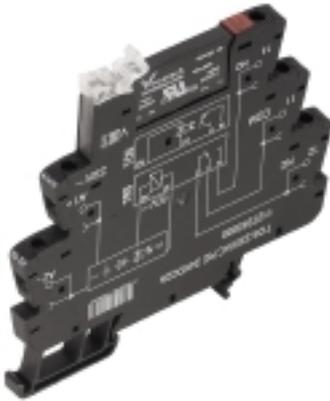
Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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 relays, 1 NO contact (Triac (zero-cross switch)), Rated control voltage: 120 V AC $\pm 10\%$ , Rated switching voltage: 24...240 V AC, Continuous current: 1 A, Screw connection
Order No.	<a href="#">1127480000</a>
Type	TOS 120VAC RC 230VAC1A
GTIN (EAN)	4032248908844
Qty.	10 pc(s).

Creation date March 23, 2021 1:14:04 AM CET

Catalogue status 12.03.2021 / 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
Net weight	31.4 g	Width	6.4 mm
Width (inches)	0.252 inch		

**Temperatures**

Storage temperature	-40 °C...70 °C	Operating temperature	-20 °C...60 °C
Humidity	5-95% relative humidity, T <sub>u</sub> = 40°C, without condensation		

**Probability of failure**

MTTF	651 Years
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**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
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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
Tightening torque, max.	0.4 Nm	Pollution severity level	2

**Control side**

Coil voltage of the replacement relay	60 V DC	Coil voltage of the replacement relay deviating from the rated control voltage	Yes
Nominal control current	7 mA AC (±20 %)	Power rating	0.84 VA
Protective circuit	Rectifier, RC element	Pull-in/drop-out voltage, typ.	79 V / 60 V AC
RC filter	94 Ω / 100 nF	Rated control voltage	120 V AC ± 10 %
Status indicator	Green LED		

**Load side**

Continuous current	1 A	Inrush current	15 A / 10 ms
Leakage current	< 1.5 mA	Min. switching current	20 mA
Output voltage frequency range	50 / 60 Hz	Protective circuit, load side	RC element
Rated switching voltage	24...240 V AC	Short-circuit-proof	No
Switch-off delay	< 11 ms	Switch-on delay	< 11 ms
Voltage drop at max. load	≤ 1.6 V	max. switching frequency (AC control voltage)	3 Hz

**Contact data**

Contact type	1 NO contact (Triac (zero- cross switch))
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**General data**

Rail	TS 35
Colour	black

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## Technical data

UL94 flammability rating component	Component	Housing
	UL94 flammability rating	V-0
	Component	Retaining clip
	UL94 flammability rating	V-0

## Insulation coordination

Clearance and creepage distances for control side - load side	≥ 5.5 mm	Dielectric strength for control side - load side	2.5 kV <sub>eff</sub>
Dielectric strength to mounting rail	4 kV <sub>eff</sub> / 1 Min.	Impulse withstand voltage	6 kV (1.2/50 μs)
Pollution severity	2	Protection degree	IP20
Rated voltage	300 V	Surge voltage category	III

## Further details of approvals / standards

Standards	DIN EN 50178	Certificate No. (DNVGL)	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 <sup>2</sup>
Clamping range, min.	0.14 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 14
Wire cross-section, solid, min.	0.14 mm <sup>2</sup>	Wire cross-section, solid, max.	2.5 mm <sup>2</sup>
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 <sup>2</sup>	Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>
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 <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.25 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	2.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, two clampable wires, min.	0.5 mm <sup>2</sup>	Wire cross-section, finely stranded, two clampable wires, max.	1 mm <sup>2</sup>
Twin wire-end ferrules, min.	0.5 mm <sup>2</sup>	Twin wire-end ferrules, max.	1 mm <sup>2</sup>
Blade size	size PHO	Gauge to IEC 60947-1	A1, B1

## Classifications

ETIM 6.0	EC001504	ETIM 7.0	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

## Approvals

Approvals



ROHS	Conform
UL File Number Search	E141197

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3

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**Technical data****Downloads**

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Approval/Certificate/Document of Conformity	<a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
Engineering Data	<a href="#">STEP</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
User Documentation	<a href="#">Beipackzettel / Package Insert - multilingual</a>

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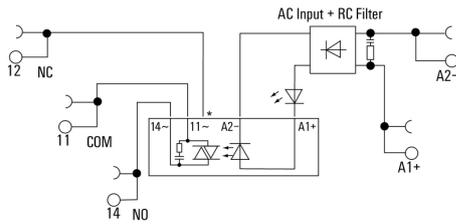
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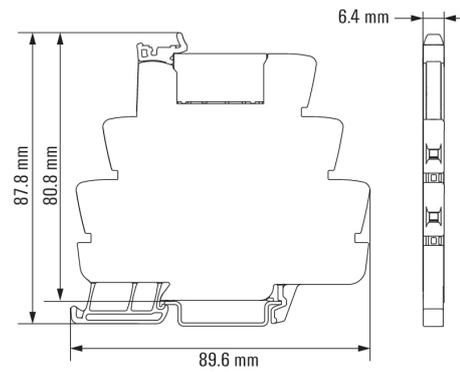
**Drawings**

**Wiring diagram**

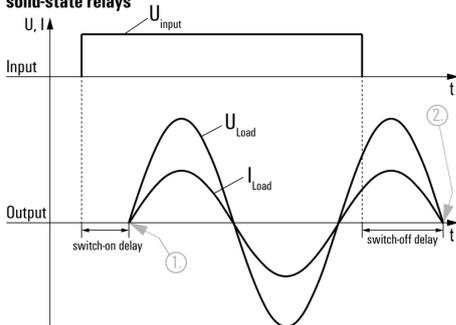


\*Contact is assembled in socket but not used with solid-state relays

**Dimensional drawing**



**Signal characteristics of zero cross switching solid-state relays**

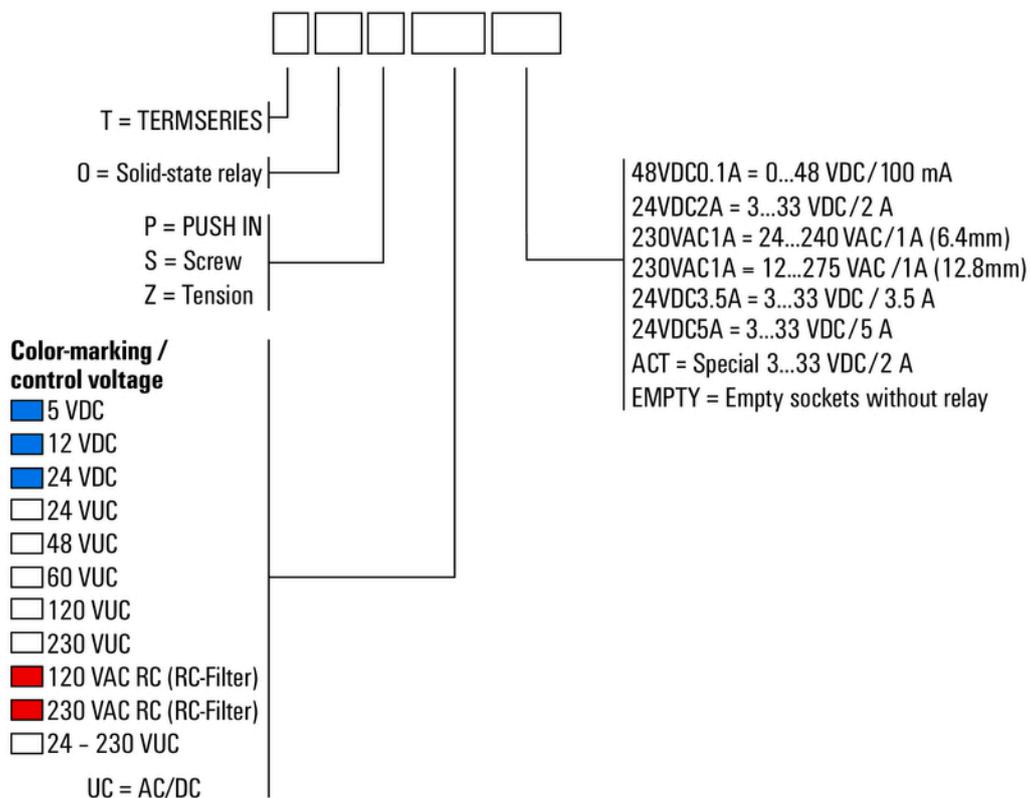


Shown at an example with resistive load.  
 1. Switches on at first zero cross of mains voltage while control input gets signal.  
 2. Switches off at next zero cross of mains current after control input signal was switched off.  
 Switching DC voltages is not possible with zero cross switching solid-state relays.

**Drawings**

**Miscellaneous**

**Type code TERMSERIES solid-state relay versions**



Type codes