

## TOZ 12VDC 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
- Type: Triac (zero-cross switch), MOS-FET, Bipolar transistor
- 2 A DC, 0,1 A DC, 1 A AC output current
- Input voltages 5 V DC and 12 V DC with coloured marking: DC: blue

### General ordering data

Version	TERMSERIES, Solid-state relay, Rated control voltage: 12 V DC $\pm 20\%$ , Rated switching voltage: 24...240 V AC, Continuous current: 1 A, Tension-clamp connection
Order No.	<a href="#">1127520000</a>
Type	TOZ 12VDC 230VAC1A
GTIN (EAN)	4032248909230
Qty.	10 pc(s).

Creation date September 16, 2022 12:51:08 AM CEST

Catalogue status 09.09.2022 / 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	30.2 g		

## 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	1,032 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	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	Pollution severity level	2

## Control side

Rated control voltage	12 V DC ±20 %	Nominal control current	9.6 mA DC (±20 %)
Power rating	112 mW	Pull-in/drop-out voltage, typ.	4.7 V / 4.6 V DC
Status indicator	Green LED	Protective circuit	Rectifier
Coil voltage of the replacement relay deviating from the rated control voltage	Yes	Coil voltage of the replacement relay	5 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

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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 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)	Protection degree	IP20

## Further details of approvals / standards

Certificate No. (DNVGL)	TAA00001E5	Certificate no. (cULus)	E141197
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## Connection data

Wire connection method	Tension-clamp connection	Stripping length, rated connection	8 mm
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.	0.14 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.14 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 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	0.6 x 3.5 mm
Gauge to IEC 60947-1	A1, B1		

## Classifications

ETIM 6.0	EC001504	ETIM 7.0	EC001504
ETIM 8.0	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

## Approvals

Approvals



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

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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="#">CAD data – STEP</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
User Documentation	<a href="#">Beipackzettel / Package Insert – multilingual</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

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**Data sheet**

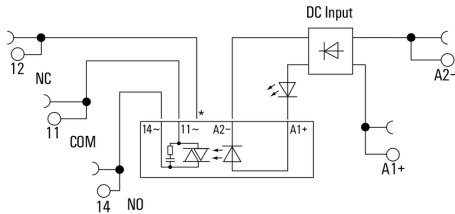
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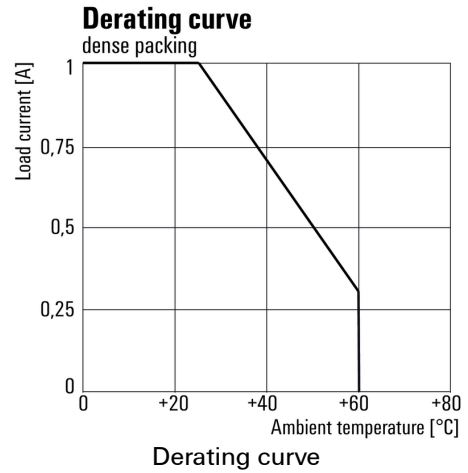
**Drawings**

**Wiring diagram**

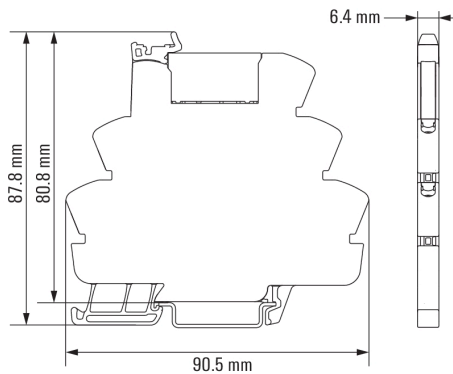


\*Contact is assembled in socket but not used with solid-state relays

**Graph**



**Dimensional drawing**



**Graph**

