

TOZ 24-230VUC 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, 1 NO contact (Triac (zero-cross switch)), Rated control voltage: 24...230 V UC $\pm 10\%$, Rated switching voltage: 24...240 V AC, Continuous current: 1 A, Tension-clamp connection
Order No.	1127620000
Type	TOZ 24-230VUC 230VAC1A
GTIN (EAN)	4032248909353
Qty.	10 pc(s).

Creation date December 15, 2021 9:00:58 AM CET

Catalogue status 30.11.2021 / 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	90.5 mm	Height (inches)	3.563 inch
Width	6.4 mm	Width (inches)	0.252 inch
Net weight	33.2 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	803 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.	40 °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	24...230 V UC ± 10 %	Nominal control current	21.8 mA DC @ 24 V DC, 24.8 mA AC @ 24 V AC, 2.4 mA DC @ 230 V DC, 4.6 mA AC @ 230 V AC
Power rating	525 mW @ 24 V DC, 600 mVA @ 24 V AC, 550 mW @ 230 V DC, 1.1 VA @ 230 V AC	Pull-in/drop-out voltage, typ.	10.5 V / 7.7 V AC 11.5 V / 6.5 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	24 V DC

Load side

Rated switching voltage	24...240 V AC	Continuous current	1 A
Voltage drop at max. load	≤ 1 V	Min. switching current	20 mA
Inrush current	15 A / 10 ms	Leakage current	< 1.5 mA
Switch-on delay	< 20 ms	Switch-off delay	< 125 ms
Output voltage frequency range	50 / 60 Hz	max. switching frequency (AC control voltage)	3 Hz
max. switching frequency (DC control voltage)	3 Hz	Protective circuit, load side	RC element
Short-circuit-proof	No	Contact type	1 NO contact (Triac (zero- cross switch))

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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	

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
Impulse withstand voltage	6 kV (1.2/50 µs)	Protection degree	IP20

Further details of approvals / standards

Standards	DIN EN 50178	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
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		

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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	E141197

Downloads

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

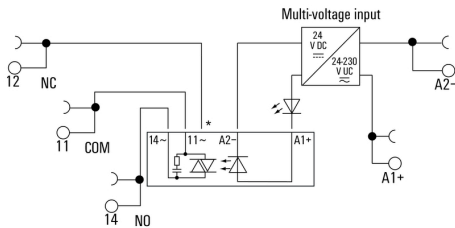
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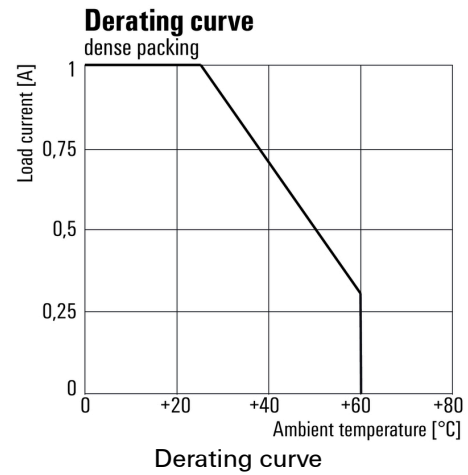
Drawings

Wiring diagram

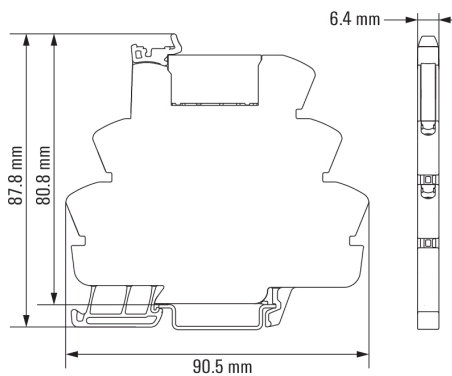


*Contact is assembled in socket but not used with solid-state relays

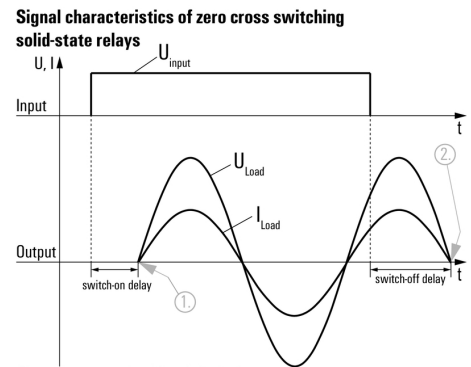
Graph



Dimensional drawing



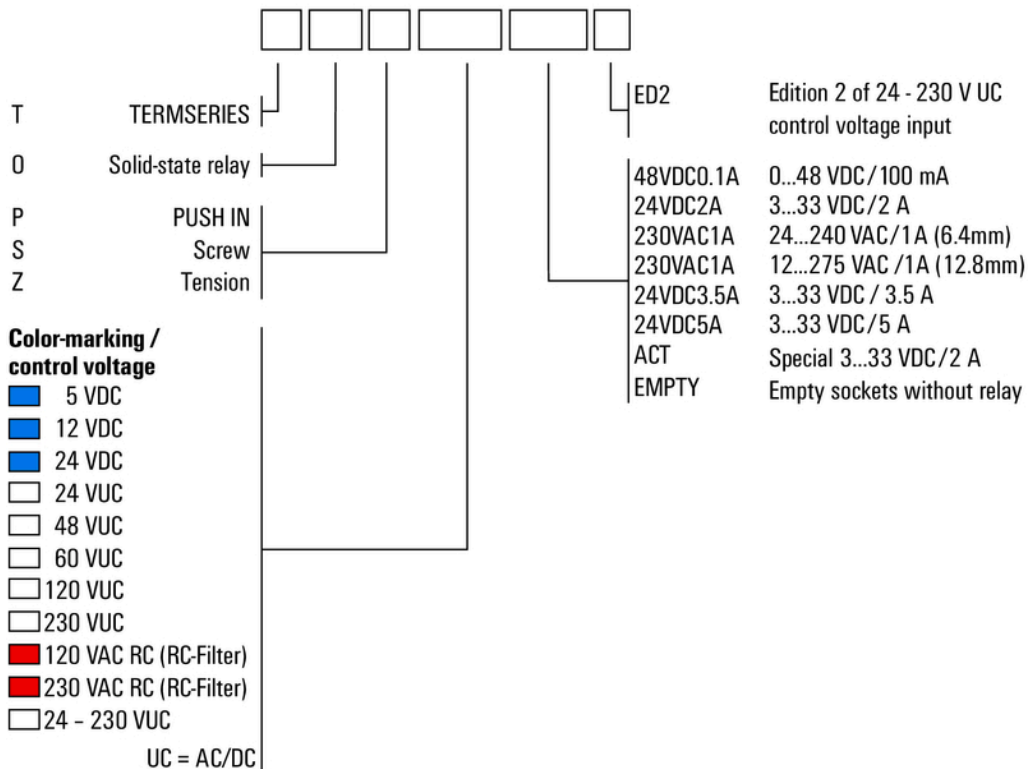
Graph



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.

Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes