TOS 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))
- 12.8 mm wide
- 1 A AC output current
- Unique multi-voltage input from 24 to 230 V UC

General ordering data

Version	TERMSERIES, Solid-state relay, Rated control voltage: 24...230 V UC ±10 % , Rated switching voltage: 12...275 V AC, Continuous current: 1 A, Screw connection
Order No.	1127690000
Type	TOS 24-230VUC 230VAC1A
GTIN (EAN)	4032248909087
Qty.	10 pc(s).

Creation date 07 February 2022 03:11:03 CET

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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	12.8 mm	Width (inches)	0.504 inch
Net weight	60 g		

Temperatures

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

Probability of failure

MTTF	797 Years

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1

Rated data UL

Ambient temperature (operational), max.	40 °C

Control side

Rated control voltage	24...230 V UC ± 10 %	Nominal control current	28 mA @ 24 V UC, 4 mA @ 230 V UC
Power rating	672 mW @ 24 V UC, 920 mW @ 230 V UC	Pull-in/drop-out voltage, typ.	12 V / 6 V AC 12 V / 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	12...275 V AC	Continuous current	1 A
Voltage drop at max. load	≤ 1.1 V	Min. switching current	50 mA
Inrush current	15 A / 10 ms	Leakage current	< 1.5 mA
Switch-on delay	≤ 12 ms	Switch-off delay	≤ 96 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))

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

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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. (DNVGL)	TAA00001E5

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 mm²
Clamping range, min.	0.14 mm²	Clamping range, max.	2.5 mm²
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 14
Wire cross-section, solid, min.	0.14 mm²	Wire cross-section, solid, max.	2.5 mm²
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 mm²	Wire connection cross section, finely stranded, max.	2.5 mm²
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 mm²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm²
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.25 mm²	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	2.5 mm²
Wire connection cross section, finely stranded, two clampable wires, min.	0.5 mm²	Wire cross-section, finely stranded, two clampable wires, max.	1 mm²
Twin wire-end ferrules, min.	0.5 mm²	Twin wire-end ferrules, max.	1 mm²
Blade size	size PH0	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		

Approvals

Approvals

ROHS	Conform

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Technical data

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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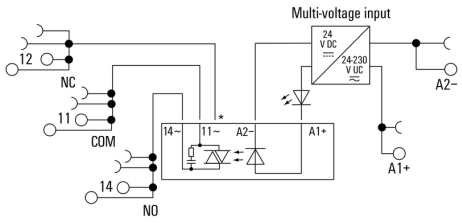
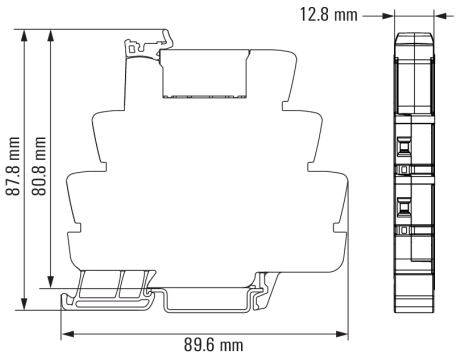
Drawings

Wiring diagram



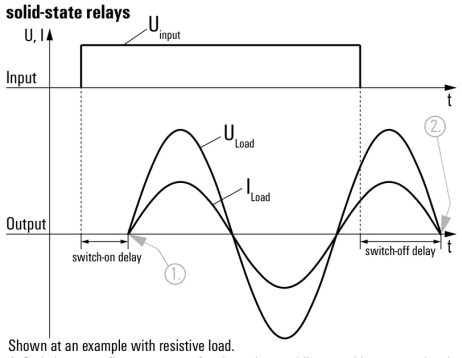
*Conntact is assembled in socket but not used with solid-state relays

Dimensional drawing



Miscellaneous

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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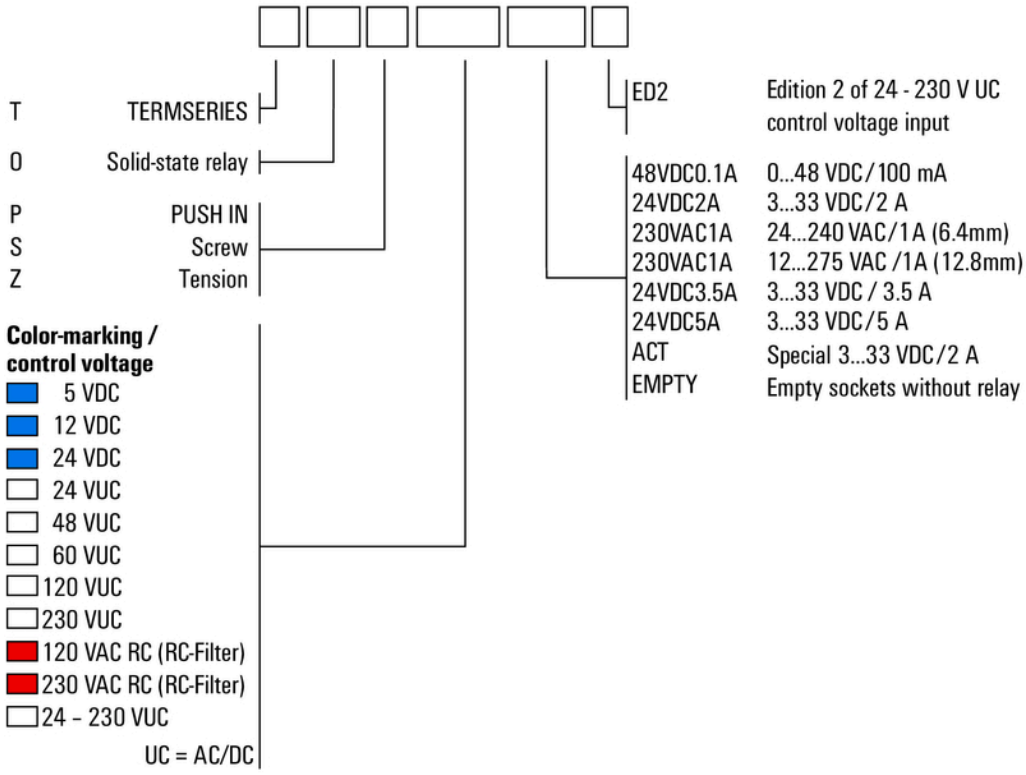
Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes