

TOS 24VDC 230VAC1A

Weidmüller Interface GmbH & Co. KG

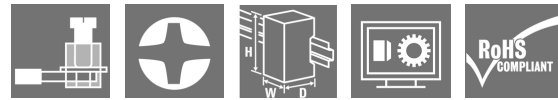
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



Similar to illustration

- 1 NO contact (Triac (zero-cross switch))
- 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 V DC $\pm 20\%$, Rated switching voltage: 12...275 V AC, Continuous current: 1 A, Screw connection
Order No.	1127680000
Type	TOS 24VDC 230VAC1A
GTIN (EAN)	4032248909414
Qty.	10 pc(s).

Creation date February 16, 2022 4:27:45 AM CET

Catalogue status 11.02.2022 / 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	89.6 mm	Height (inches)	3.528 inch
Width	12.8 mm	Width (inches)	0.504 inch
Net weight	55 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	1,109 Years
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Control side

Rated control voltage	24 V DC ± 20 %	Nominal control current	10 mA DC ±20 %
Power rating	240 mW	Pull-in/drop-out voltage, typ.	15 V / 5 V DC
Status indicator	Green LED	Protective circuit	Free-wheeling diode, Reverse polarity protection
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	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	≤ 12 ms
Output voltage frequency range	50 / 60 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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Technical data**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
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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
Twin wire-end ferrules, min.	0.5 mm ²	Twin wire-end ferrules, max.	1 mm ²
Blade size	size PHO	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 Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Beipackzettel / Package Insert – multilingual
Catalogues	Catalogues in PDF-format
Brochures	

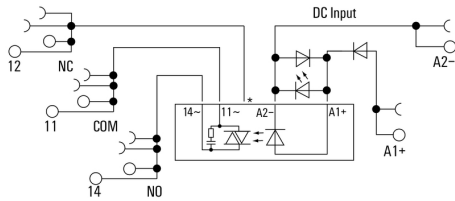
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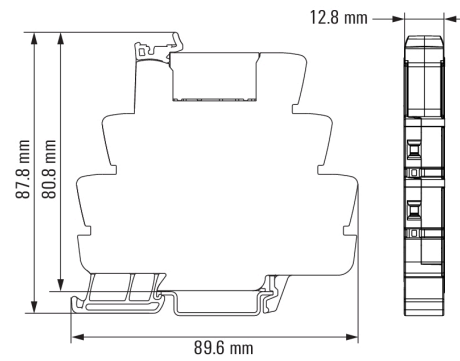
Drawings

Wiring diagram



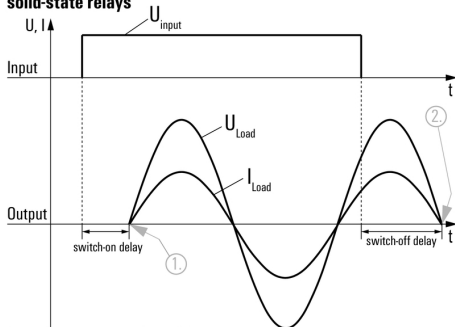
*Contact is assembled in socket but not used with solid-state relays

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.

Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes