

TOS 12VDC 24VDC2A

Weidmüller Interface GmbH & Co. KG

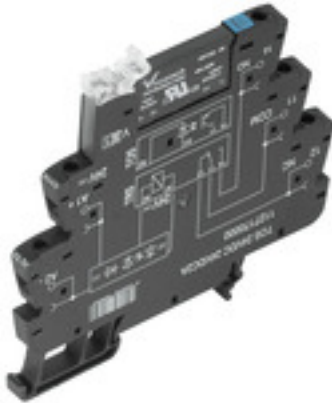
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image



Similar to illustration

- 1 NO contact (MOS-FET)
- 6.4 mm wide
- 2 A DC 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, Rated control voltage: 12 V DC $\pm 20\%$, Rated switching voltage: 3...33 V DC, Continuous current: 2 A, Screw connection
Order No.	1127150000
Type	TOS 12VDC 24VDC2A
GTIN (EAN)	4032248908745
Qty.	10 pc(s).

Creation date October 3, 2022 6:40:56 PM CEST

Catalogue status 23.09.2022 / 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	89.6 mm	Height (inches)	3.528 inch
Width	6.4 mm	Width (inches)	0.252 inch
Net weight	31.4 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	998 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

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.	5.2 V / 4.5 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	5 V DC

Load side

Rated switching voltage	3...33 V DC	Continuous current	2 A
Rated switching current	2 A	Inrush current	15 A / 10 ms
Switch-on delay	≤0,1 ms	Switch-off delay	< 1 ms
Voltage drop at max. load	≤ 120 mV	Leakage current	< 10 µA
Min. switching current	5 mA	Short-circuit-proof	No
Protective circuit, load side	Free-wheeling diode	Contact type	1 NO contact (MOS-FET)
max. switching frequency (DC control voltage)	300 Hz		

General data

Rail	TS 35								
Test button available	No								
Colour	black								
UL94 flammability rating component	<table border="1"> <tr> <td>Component</td> <td>Housing</td> </tr> <tr> <td>UL94 flammability rating</td> <td>V-0</td> </tr> <tr> <td>Component</td> <td>Retaining clip</td> </tr> <tr> <td>UL94 flammability rating</td> <td>V-0</td> </tr> </table>	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	Certificate no. (cULus)	E141197
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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	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**

Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD, Zuken E3.S
User Documentation	Beipackzettel / Package Insert – multilingual
Catalogues	Catalogues in PDF-format
Brochures	

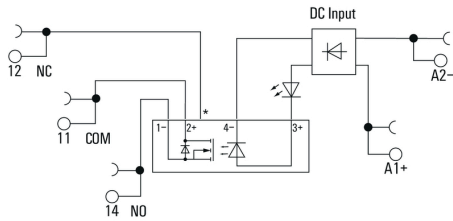
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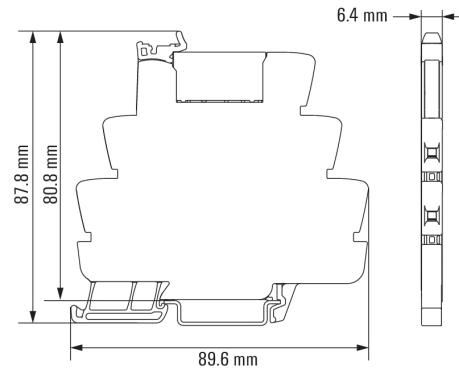
Drawings

Wiring diagram



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

Dimensional drawing



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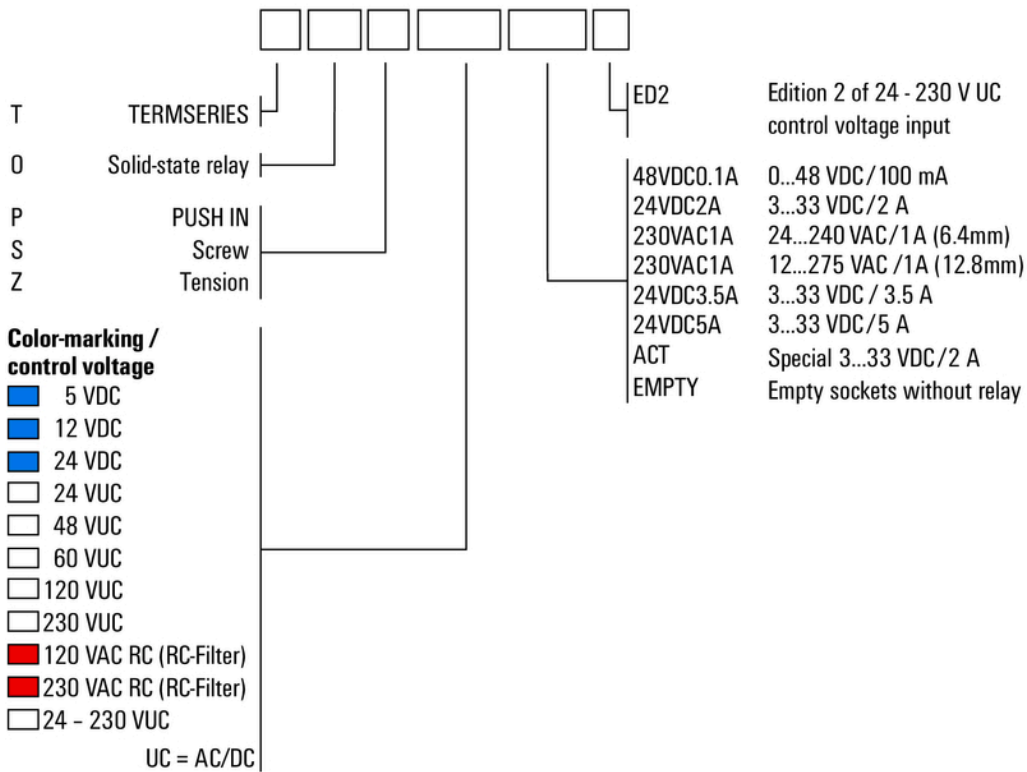
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Drawings

Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes