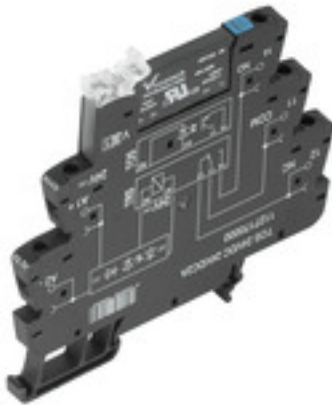


TERMSERIES
TOS 5VDC 24VDC2A

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

Product image

Similar to illustration

TERMSERIES complete solid-state relay modules 3 to 33 V DC 2 A output versions consisting of a solid-state relay and a base with AC/DC/UC input; available in different designs:

- With screw connection
- In 6.4 mm width
- Optionally with multiple-voltage input: 24 to 230 V UC
- With various protective circuits in the input (free-wheel diode, RC element)
- Illuminated ejection lever

General ordering data

Type	TOS 5VDC 24VDC2A
Order No.	1127140000
Version	TERMSERIES, solid-state relays, 1 NO contact (MOS-FET), Rated control voltage: 5 V DC $\pm 20\%$, Rated switching voltage: 3...33 V DC, Continuous current: 2 A, Screw connection
GTIN (EAN)	4032248908509
Qty.	10 pc(s).

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Technical data**Dimensions and weights**

Width	6.4 mm	Width (inches)	0.252 inch
Height	89.6 mm	Height (inches)	3.528 inch
Depth	87.8 mm	Depth (inches)	3.457 inch
Net weight	32.4 g		

Temperatures

Humidity	5-95% relative humidity, $T_u = 40^\circ\text{C}$, without condensation	Operating temperature, max.	60 °C
Operating temperature, min.	-20 °C	Storage temperature, max.	70 °C
Storage temperature, min.	-40 °C	Operating temperature	-20 °C...60 °C
Storage temperature	-40 °C...70 °C		

Probability of failure

MTTF	1,079 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.	Type of conductor	rigid copper conductor, flexible copper conductor
AWG 14	Pollution severity level	2
Tightening torque, max.		
0.4 Nm		

Control side

Rated control voltage	5 V DC $\pm 20\%$	Nominal control current	11.5 mA DC ($\pm 20\%$)
Power rating	50 mW	Cut-in / dropout voltage	2.3 V / 1.8 V DC
Cut-in / dropout current	1.1 mA / 0.55 mA 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	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	$\leq 0,1$ 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	max. switching frequency (DC control voltage)	300 Hz

Contact data

Contact type	1 NO contact (MOS-FET)
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Technical data**General data**

Rail	TS 35	Colour	Black
UL 94 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	4 kV _{eff} / 1 Min.
Impulse withstand voltage	6 kV (1.2/50 µs)	Protection degree	IP20

Further details of approvals / standards

Standards	DIN EN 50178	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 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 PH0	Gauge to IEC 60947-1	A1, B1

Ratings IECEx/ATEX/cUL

Certificate no. (cULus)	E141197
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Classifications

ETIM 6.0	EC001504	ETIM 7.0	EC001504
eClass 9.0	27-37-16-04	eClass 9.1	27-37-16-04
eClass 10.0	27-37-16-04		

Approvals

Approvals



ROHS	Conform
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Creation date January 2, 2020 8:14:03 PM CET

Catalogue status 06.12.2019 / We reserve the right to make technical changes.

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Technical data

Downloads

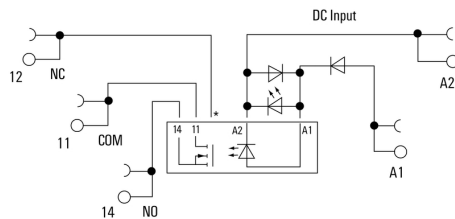
Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Brochure/Catalogue	CAT 4.2 ELECTR 18/19 EN
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Engineering Data	STEP
User Documentation	Beipackzettel / Package Insert - multilingual

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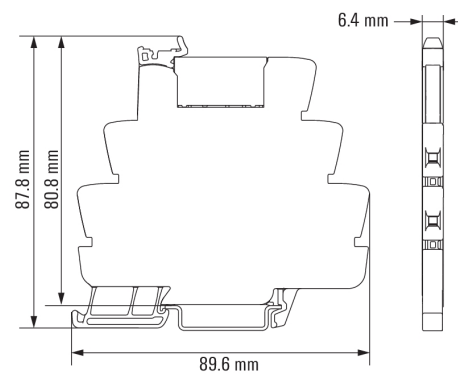
Drawings

Wiring diagram



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

Dimensional drawing



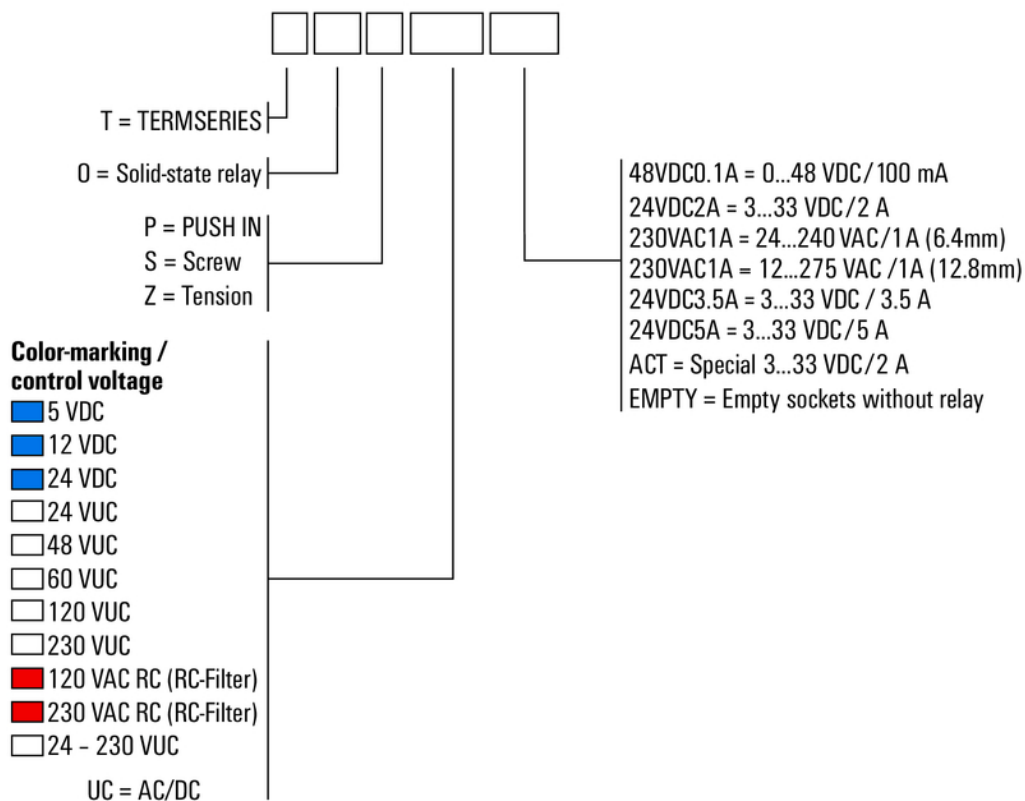
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Drawings

Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes