

## TERMSERIES TOS 24VDC 24VDC2A

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com



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 24VDC 24VDC2A
Order No.	<a href="#">1127170000</a>
Version	TERMSERIES, solid-state relays, 1 NO contact (MOS-FET), Rated control voltage: 24 V DC $\pm 20\%$ , Rated switching voltage: 3...33 V DC, Continuous current: 2 A, Screw connection
GTIN (EAN)	4032248908936
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	32.2 g		

**Temperatures**

Humidity	5–95% rel. humidity, $T_u = 40^\circ\text{C}$ , no 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	1,077 Years
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**Control side**

Rated control voltage	24 V DC $\pm 20\%$	Nominal control current	11.5 mA DC ( $\pm 20\%$ )
Power rating	0.29 W	Cut-in / dropout voltage	14 V / 12.5 V DC
Cut-in / dropout current	6.2 mA / 5.4 mA DC	Status indicator	Green LED
Protective circuit	Free-wheel 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	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	$\leq 120$ mV	Leakage current	< 10 $\mu\text{A}$
Min. switching current	5 mA	Short-circuit-proof	No
Protective circuit, load side	Free-wheel diode	max. switching frequency (DC control voltage)	300 Hz

**Contact data**

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

Mounting rail	TS 35	UL 94 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	$\geq 5.5$ mm
Dielectric strength for control side - load side	2.5 kV <sub>eff</sub>	Dielectric strength to mounting rail	4 kV <sub>eff</sub> / 1 min.
Impulse withstand voltage	6 kV (1.2/50 $\mu\text{s}$ )	Protection degree	IP20

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**Technical data****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 <sup>2</sup>
Clamping range, min.	0.14 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 14
Wire cross-section, solid, min.	0.14 mm <sup>2</sup>	Wire cross-section, solid, max.	2.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded, min.	0.14 mm <sup>2</sup>	Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>
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 <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.25 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	2.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, two clampable wires, min.	0.5 mm <sup>2</sup>	Wire cross-section, finely stranded, two clampable wires, max.	1 mm <sup>2</sup>
Twin wire-end ferrules, min.	0.5 mm <sup>2</sup>	Twin wire-end ferrules, max.	1 mm <sup>2</sup>
Blade size	size PHO	Gauge to IEC 60947-1	A1, B1

**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
Tightening torque, max.	Pollution severity level	2

**Classifications**

ETIM 4.0	EC001504	ETIM 5.0	EC001504
ETIM 6.0	EC001504	eClass 6.2	27-27-09-90
eClass 7.1	27-27-09-90	eClass 8.1	27-27-09-90
eClass 9.0	27-27-09-90	eClass 9.1	27-37-16-04

**Product information**

Descriptive text ordering data	Spare solid-state relay Type: SSS 24 V/24 V 2 A DC Orderno.: 4061190000
Descriptive text technical data	Accessories and dimensional drawings: refer to the TERMSERIES Accessories page.

**Approvals**

Approvals



ROHS Conform

**Data sheet****TERMSERIES**  
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Approval/Certificate/Document of Conformity	<a href="#">DE_PA_5600_160229_002.pdf</a>
Brochure/Catalogue	<a href="#">CAT 4.2 ELECTR 15/16 EN</a>
Engineering Data	<a href="#">EPLAN, WSCAD, Zuken E3.S</a>
Engineering Data	<a href="#">STEP</a>
User Documentation	<a href="#">Operating Instructions</a>

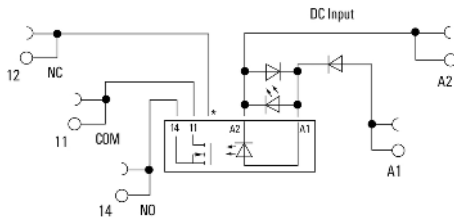
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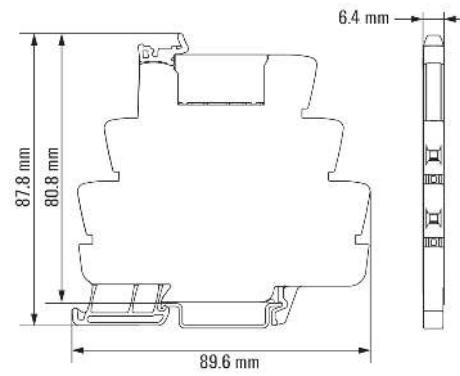
**Drawings**

**Wiring diagram**



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

**Dimensional drawing**

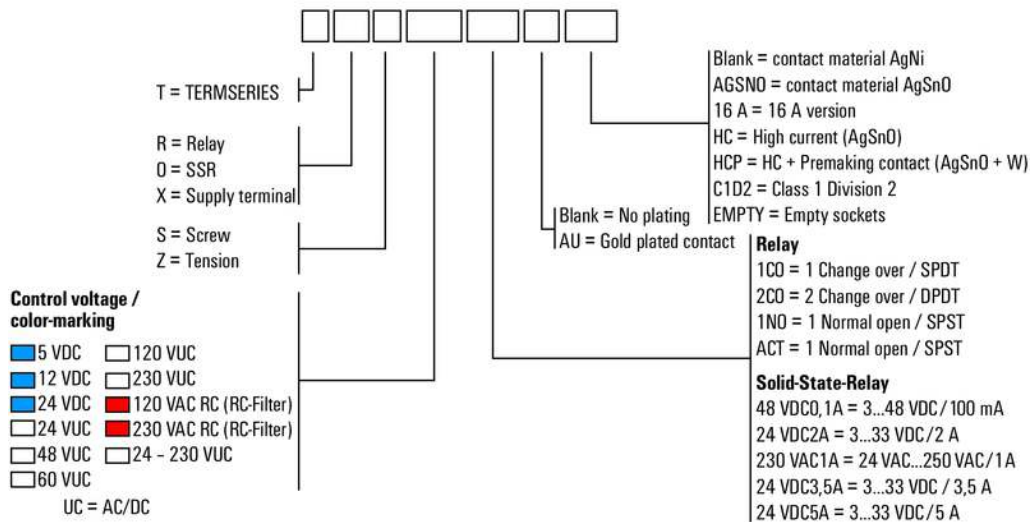


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**Drawings**

**Miscellaneous**



Type codes