

## TERMSERIES TOS 24VDC ACT

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany  
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### Product image



Similar to illustration

TERMSERIES solid-state relay modules consisting of a solid-state relay and a base with AC/DC/UC input; available in different versions:

- With screw and tension-clamp connection
- With AC and DC outputs
- In 6.4 mm and 12.8 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 ACT
Order No.	<a href="#">1391680000</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)	4050118192070
Qty.	10 pc(s).

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Catalogue status 09.06.2020 / We reserve the right to make technical changes.

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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	31.4 g		

**Temperatures**

Humidity	5-95% relative humidity, T <sub>u</sub> = 40°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	1,077 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	Output current derating (ohmic)	1.5 A @ 60 °C, 2 A @ 55 °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	24 V DC ±20 %	Nominal control current	11.5 mA DC (±10 %)
Power rating	280 mW	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-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	3...33 V DC	Continuous 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
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**

Version	Actuator version	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 <sub>eff</sub>	Dielectric strength to mounting rail	4 kV <sub>eff</sub> / 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. (DNVGL)	TAA00001E5
Certificate no. (cULus)	E141197		

**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

**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

**Data sheet****TERMSERIES  
TOS 24VDC ACT**

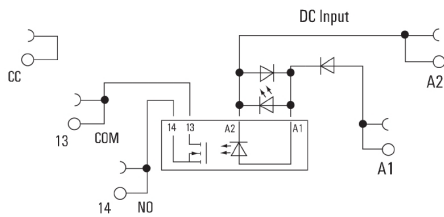
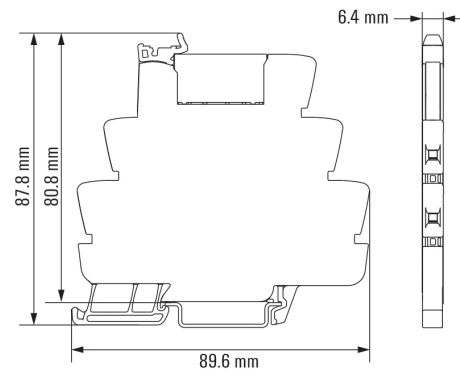
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**Technical data****Downloads**

Approval/Certificate/Document of Conformity	<a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
Brochure/Catalogue	<a href="#">CAT 4.2 ELECTR 18/19 EN</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
Engineering Data	<a href="#">STEP</a>
User Documentation	<a href="#">Beipackzettel / Package Insert – multilingual</a>

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**Drawings****Wiring diagram****Dimensional drawing**

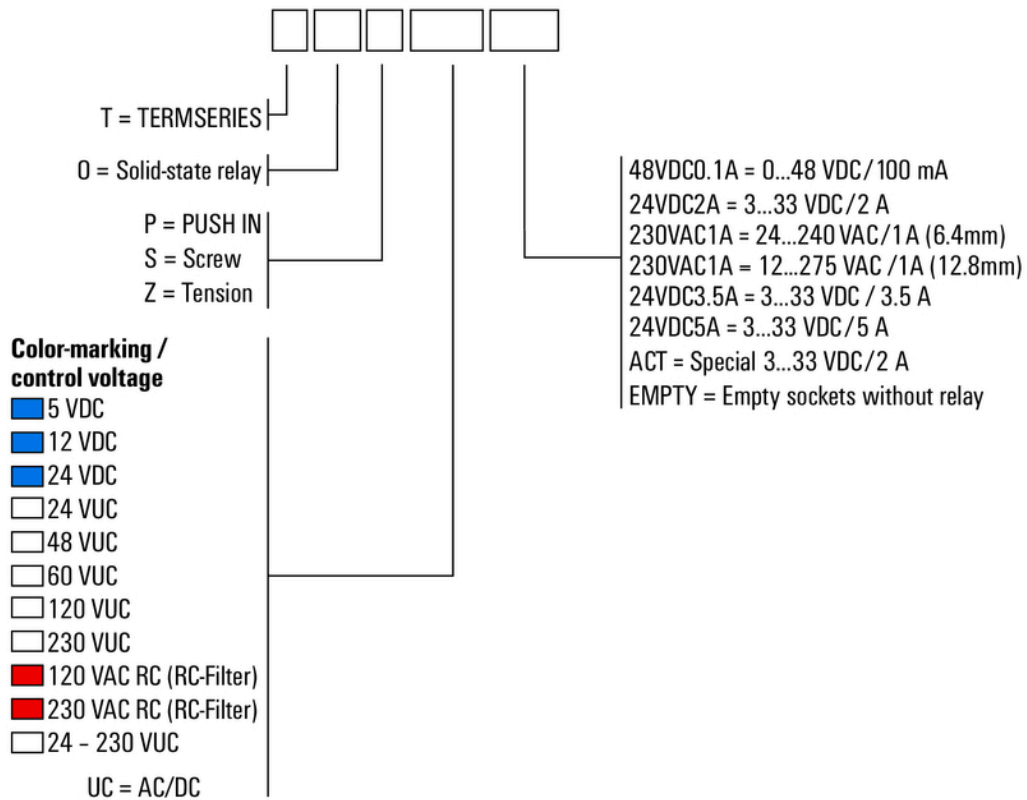
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**Drawings**

**Miscellaneous**

**Type code TERMSERIES solid-state relay versions**



Type codes