

## TOS 120VAC RC 48VDC0,1A

**Weidmüller Interface GmbH & Co. KG**

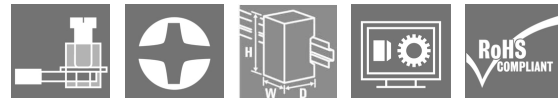
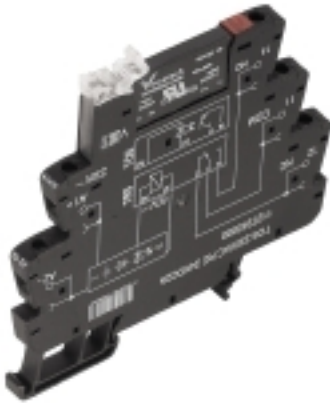
Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

### Product image



Similar to illustration

- 1 NO contact (Bipolar transistor)
- 6.4 mm wide
- 0.1 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 relays, 1 NO contact (Bipolar transistor), Rated control voltage: 120 V AC $\pm 10\%$ , Rated switching voltage: 0...48 V DC, Continuous current: 100 mA, Screw connection
Order No.	<a href="#">1127000000</a>
Type	TOS 120VAC RC 48VDC0,1A
GTIN (EAN)	4032248908691
Qty.	10 pc(s).

Creation date March 23, 2021 1:10:36 AM CET

Catalogue status 12.03.2021 / We reserve the right to make technical changes.

**TOS 120VAC RC 48VDC0,1A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Technical data****Dimensions and weights**

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

**Temperatures**

Storage temperature	-40 °C...70 °C	Operating temperature	-20 °C...60 °C
Humidity	5-95% relative humidity, T <sub>u</sub> = 40°C, without condensation		

**Probability of failure**

MTTF	1,079 Years
------	-------------

**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
------------	----------------

**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**

Coil voltage of the replacement relay	60 V DC	Coil voltage of the replacement relay deviating from the rated control voltage	Yes
Nominal control current	7 mA AC (±20 %)	Power rating	0.84 VA
Protective circuit	Rectifier, RC element	Pull-in/drop-out voltage, typ.	79 V / 60 V AC
RC filter	94 Ω / 100 nF	Rated control voltage	120 V AC ± 10 %
Status indicator	Green LED		

**Load side**

Continuous current	0.1 A	Leakage current	< 10 µA
Min. switching current	500 µA	Protective circuit, load side	Free-wheeling diode
Rated switching voltage	48 V DC	Short-circuit-proof	No
Switch-off delay	< 10 ms	Switch-on delay	< 6.5 ms
Voltage drop at max. load	≤ 1 V	max. switching frequency (AC control voltage)	3 Hz

**Contact data**

Contact type	1 NO contact (Bipolar transistor)
--------------	--------------------------------------

**General data**

Rail	TS 35
Colour	black

Creation date March 23, 2021 1:10:36 AM CET

Catalogue status 12.03.2021 / We reserve the right to make technical changes.

2

**TOS 120VAC RC 48VDC0,1A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Technical data**

UL94 flammability rating component	Component	Housing
	UL94 flammability rating	V-0
	Component	Retaining clip
	UL94 flammability rating	V-0

**Insulation coordination**

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)
Pollution severity	2	Protection degree	IP20
Rated voltage	300 V	Surge voltage category	III

**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 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 <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 PH0	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	ECLASS 11.0	27-37-16-04

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	E141197

Creation date March 23, 2021 1:10:36 AM CET

Catalogue status 12.03.2021 / We reserve the right to make technical changes.

**TOS 120VAC RC 48VDC0,1A**

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

[www.weidmueller.com](http://www.weidmueller.com)

**Technical data****Downloads**

---

Approval/Certificate/Document of Conformity	<a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
Engineering Data	<a href="#">STEP</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
User Documentation	<a href="#">Beipackzettel / Package Insert - multilingual</a>

---

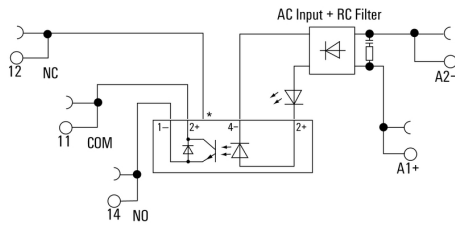
**TOS 120VAC RC 48VDC0,1A**

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

[www.weidmueller.com](http://www.weidmueller.com)

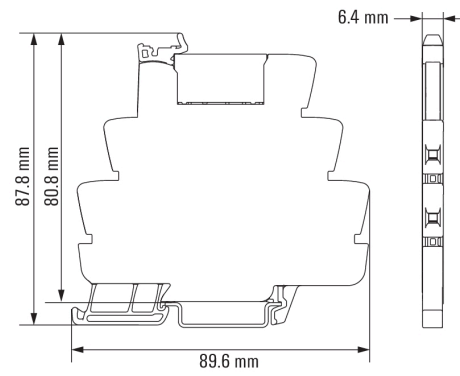
**Drawings**

**Wiring diagram**



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

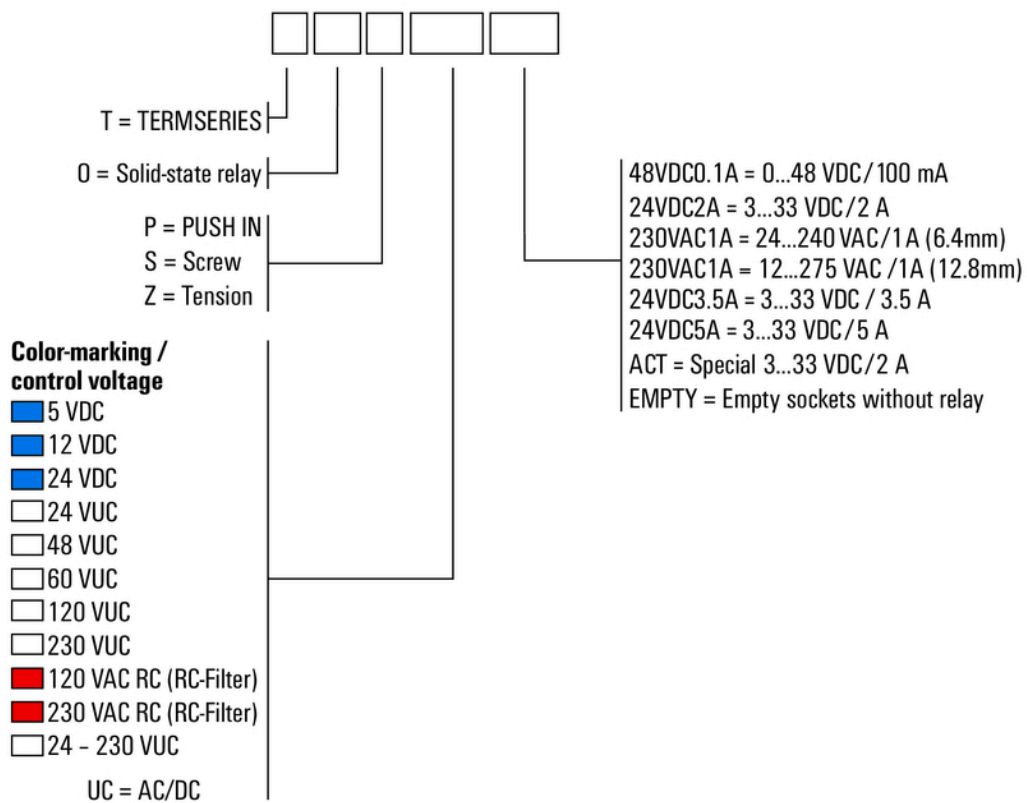
**Dimensional drawing**



**Drawings**

**Miscellaneous**

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



Type codes