

## TOS 5VDC/48VDC 0,5A

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Similar to illustration

- 1 NO contact (Transistor)
- Ensures wear- and maintenance-free potential separation in compact terminal block format
- Suitable accessories from the cross-connection to the marker
- Integrated protective circuit for inputs and outputs

### General ordering data

Version	TERMOPTO, Solid-state relay, Rated control voltage: 5 V DC $\pm 20\%$ , Rated switching voltage: 5...48 V DC, Continuous current: 0.5 A, Screw connection
Order No.	<a href="#">8950900000</a>
Type	TOS 5VDC/48VDC 0,5A
GTIN (EAN)	403224874227 1
Qty.	10 items

## TOS 5VDC/48VDC 0,5A

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E223474

## Dimensions and weights

Depth	55 mm	Depth (inches)	2.1654 inch
Height	74.4 mm	Height (inches)	2.9291 inch
Width	6.1 mm	Width (inches)	0.2402 inch
Net weight	20.1 g		

## Temperatures

Storage temperature	-40 °C...80 °C	Ambient temperature	-20 °C...60 °C
Operating temperature		Humidity	5-95% relative humidity, Tu = 40°C, without condensation

## Probability of failure

MTTF 2500 a

## Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a
REACH SVHC	Lead 7439-92-1
SCIP	9e2cbc49-76d9-4611-b8ec-5b4f549a0aa9

## Control side

Rated control voltage	5 V DC $\pm$ 20 %	Rated control voltage (control input)	5 V DC $\pm$ 20 %
Nominal control current	7.7 mA DC	Power rating	<40 mW
Status indicator	Green LED	Protective circuit	Varistor, Reverse polarity protection
Input frequency	200 Hz		

## Load side

Rated switching voltage	5...48 V DC	Continuous current	0.5 A (DC1)
Rated switching current	500 mA	Load category	DC1
Max. switching voltage, DC	48 V	Switch-on delay	<20 $\mu$ s
Switch-off delay	<200 $\mu$ s	Voltage drop at max. load	<1 V
Leakage current	<10 $\mu$ A	Short-circuit-proof	No
Protective circuit, load side	Free-wheeling diode	Contact type	1 NO contact (Transistor)
max. switching frequency (DC control voltage)	200 Hz		

## General data

Mounting rail TS 35

## TOS 5VDC/48VDC 0,5A

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

Test button available	No	
Colour	black	
UL94 flammability rating component	Component	Housing
	UL94 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	> 3 mm
Dielectric strength for control side - load side	1.2 kVeff / 1 min.	Impulse withstand voltage	4 kV (1.2/50 µs)
Protection degree	IP20		

## Further details of approvals / standards

Certificate no. (cULus)	E223474
-------------------------	---------

## Connection data

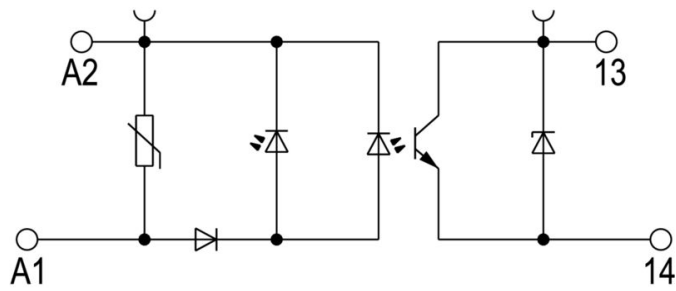
Wire connection method	Screw connection	Stripping length, rated connection	9 mm
Tightening torque, min.	0.4 Nm	Tightening torque, max.	0.6 Nm
Clamping range, rated connection	2.5 mm <sup>2</sup>	Clamping range, min.	0.5 mm <sup>2</sup>
Clamping range, max.	4 mm <sup>2</sup>	Wire connection cross section AWG, min.	AWG 20
Wire connection cross section AWG, max.	AWG 12	Wire cross-section, solid, min.	0.5 mm <sup>2</sup>
Wire cross-section, solid, max.	4 mm <sup>2</sup>	Wire connection cross section, finely stranded, min.	0.5 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 20
Wire cross-section, finely stranded, max. (AWG)	AWG 12	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm <sup>2</sup>	Blade size	0.6 x 3.5 mm

## Classifications

ETIM 8.0	EC001504	ETIM 9.0	EC001504
ETIM 10.0	EC001504	ECLASS 14.0	27-37-16-04
ECLASS 15.0	27-37-16-04		

Drawings

Wiring diagram



Schaltsymbol

Dimensional drawing



**Miscellaneous**



Type codes