

TOS 12VDC 48VDC0,1A

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

www.weidmueller.com

Product image



Similar to illustration

- 1 NO contact
- Type: Triac (zero-cross switch), MOS-FET, Bipolar transistor
- 2 A DC, 0,1 A DC, 1 A AC output current
- Input voltages 5 V DC and 12 V DC with coloured marking: DC: blue

General ordering data

Version	TERMSERIES, Solid-state relay, Rated control voltage: 12 V DC $\pm 20\%$, Rated switching voltage: 3...48 V DC, Continuous current: 0.1 A, Screw connection
Order No.	1126930000
Type	TOS 12VDC 48VDC0,1A
GTIN (EAN)	4032248908653
Qty.	10 items

TOS 12VDC 48VDC0,1A

Weidmüller Interface GmbH & 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) E141197

Dimensions and weights

Depth	87.8 mm	Depth (inches)	3.4567 inch
Height	89.6 mm	Height (inches)	3.5276 inch
Width	6.4 mm	Width (inches)	0.252 inch
Net weight	31.4 g		

Temperatures

Storage temperature	-40 °C...70 °C	Ambient temperature	-20 °C...60 °C
Operating temperature		Humidity	5-95% relative humidity, Tu = 40°C, without condensation

Probability of failure

MTTF 3026 a

Environmental Product Compliance

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

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

Rated control voltage	12 V DC $\pm 20\%$	Nominal control current	5 mA DC ($\pm 20\%$)
Power rating	112 mW	Status indicator	Green LED
Protective circuit	Rectifier	Input frequency	10 Hz
Coil voltage of the replacement relay deviating from the rated control voltage	Yes	Coil voltage of the replacement relay	5 V DC

Load side

Rated switching voltage	3... 48 V DC	Continuous current	0.1 A
Rated switching current	100 mA	Switch-on delay	≤ 0.4 ms
Switch-off delay	≤ 3 ms	Voltage drop at max. load	≤ 1 V
Leakage current	$< 10 \mu\text{A}$	Min. switching current	500 μA

TOS 12VDC 48VDC0,1A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

Short-circuit-proof	No	Protective circuit, load side	Free-wheeling diode
Contact type	1 NO contact (Bipolar transistor)	max. switching frequency (DC control voltage)	10 Hz

General data

Mounting rail	TS 35		
Test button available	No		
Colour	black		
UL94 flammability rating component	Component	Housing	
	UL94 flammability rating	V-0	
	Component	Retaining clip	
	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	≥ 5.5 mm
Dielectric strength for control side - load side	2.5 kVeff	Dielectric strength to mounting rail	4 kVeff / 1 Min.
Impulse withstand voltage	6 kV (1.2/50 µs)	Protection degree	IP20

Further details of approvals / standards

Certificate No. (DNV)	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 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 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 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
Blade size	size PHO		

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		

TOS 12VDC 48VDC0,1A

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

www.weidmueller.com

Drawings

Wiring diagram



Dimensional drawing



Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes