

TOS 48VUC 24VDC2A

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

www.weidmueller.com

Product image



Similar to illustration

- 1 NO contact (MOS-FET)
- 6.4 mm wide
- 2 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 relay, Rated control voltage: 48 V UC $\pm 10\%$, Rated switching voltage: 3...33 V DC, Continuous current: 2 A, Screw connection
Order No.	1127190000
Type	TOS 48VUC 24VDC2A
GTIN (EAN)	4032248908592
Qty.	10 items

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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	32.4 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	793 a
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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	48 V UC ±10 %	Nominal control current	8 mA AC (±20 %), 7 mA DC (±20 %)
Power rating	290 mVA / 192 mW	Status indicator	Green LED
Protective circuit	Rectifier	Input frequency	DC: 10 Hz / AC: 3 Hz
Coil voltage of the replacement relay deviating from the rated control voltage	Yes	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	<6.5 ms	Switch-off delay	<10 ms
Voltage drop at max. load	≤ 120 mV	Leakage current	<10 µA

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Min. switching current	5 mA	Short-circuit-proof	No
Protective circuit, load side	Free-wheeling diode	Contact type	1 NO contact (MOS-FET)
max. switching frequency (AC control voltage)	3 Hz	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
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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 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 PH0		

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		

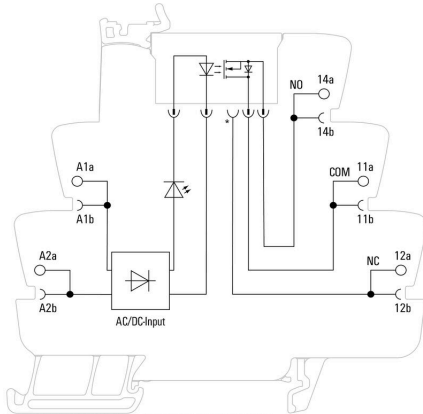
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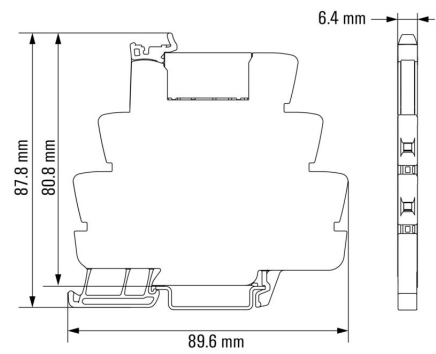
Drawings

Wiring diagram



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

Dimensional drawing



Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes