

TOZ 12VDC 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 relays, 1 NO contact (MOS-FET), Rated control voltage: 12 V DC $\pm 20\%$, Rated switching voltage: 3...33 V DC, Continuous current: 2 A, Tension-clamp connection
Order No.	1127280000
Type	TOZ 12VDC 24VDC2A
GTIN (EAN)	4032248908943
Qty.	10 pc(s).

Creation date March 23, 2021 1:12:39 AM CET

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

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Technical data

Dimensions and weights

Depth	87.8 mm	Depth (inches)	3.457 inch
Height	90.5 mm	Height (inches)	3.563 inch
Net weight	30 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 _u = 40°C, without condensation		

Probability of failure

MTTF	998 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		Connection cross-section AWG, min.	AWG 26
Connection cross-section AWG, max.	AWG 14	Type of conductor	rigid copper conductor, flexible copper conductor
Pollution severity level	2		

Control side

Coil voltage of the replacement relay	5 V DC	Coil voltage of the replacement relay deviating from the rated control voltage	Yes
Nominal control current	9.6 mA DC (±20 %)	Power rating	112 mW
Protective circuit	Rectifier	Pull-in/drop-out current, typ.	0.9 mA / 0.6 mA DC
Pull-in/drop-out voltage, typ.	5.2 V / 4.5 V DC	Rated control voltage	12 V DC ± 20 %
Status indicator	Green LED		

Load side

Continuous current	2 A	Inrush current	15 A / 10 ms
Leakage current	< 10 µA	Min. switching current	5 mA
Protective circuit, load side	Free-wheeling diode	Rated switching voltage	3...33 V DC
Short-circuit-proof	No	Switch-off delay	< 1 ms
Switch-on delay	≤ 0.1 ms	Voltage drop at max. load	≤ 120 mV
max. switching frequency (DC control voltage)	300 Hz		

Contact data

Contact type	1 NO contact (MOS-FET)
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General data

Rail	TS 35
Colour	black

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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 _{eff}
Dielectric strength to mounting rail	4 kV _{eff} / 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	Tension-clamp connection	Stripping length, rated connection	8 mm
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.	0.14 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.14 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm ²	Twin wire-end ferrules, min.	0.5 mm ²
Twin wire-end ferrules, max.	1 mm ²	Blade size	0.6 x 3.5 mm
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

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Data sheet**TOZ 12VDC 24VDC2A**

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Technical data**Downloads**

Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD, Zuken E3.S
User Documentation	Beipackzettel / Package Insert - multilingual

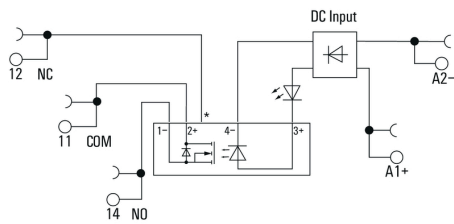
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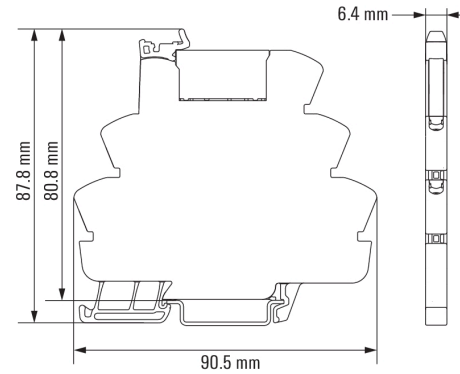
Drawings

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