

TOS 12VDC/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 relays, 1 NO contact (Transistor), Rated control voltage: 12 V DC $\pm 20\%$, Rated switching voltage: 5...48 V DC, Continuous current: 500 mA, Screw connection
Order No.	8950910000
Type	TOS 12VDC/48VDC 0,5A
GTIN (EAN)	4032248741755
Qty.	10 pc(s).

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

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Technical data

Dimensions and weights

Depth	55 mm	Depth (inches)	2.165 inch
Height	74.4 mm	Height (inches)	2.929 inch
Net weight	20.9 g	Width	6.1 mm
Width (inches)	0.24 inch		

Temperatures

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

Probability of failure

MTTF	2,500 Years
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Control side

Nominal control current	7.8 mA DC	Power rating	< 95 mW
Protective circuit	Varistor, Reverse polarity protection	Pull-in/drop-out voltage, typ.	9.6 V / 3 V DC
Rated control voltage	12 V DC ± 20 %	Status indicator	Green LED

Load side

Continuous current	0.5 A (DC1)	Leakage current	< 10 µA
Load category	DC1	Protective circuit, load side	Free-wheeling diode
Rated switching voltage	5...48 V DC	Short-circuit-proof	No
Switch-off delay	< 200 µs	Switch-on delay	< 20 µs
Voltage drop at max. load	< 1 V	max. switching frequency (DC control voltage)	200 Hz

Contact data

Contact type	1 NO contact (Transistor)
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General data

Rail	TS 35	
Colour	black	
UL94 flammability rating component	Component	Housing
	UL94 flammability rating	V-0

Insulation coordination

Clearance and creepage distances for control side - load side	> 3 mm	Dielectric strength for control side - load side	1.2 kV _{eff} / 1 min.
Impulse withstand voltage	4 kV (1.2/50 µs)	Pollution severity	2
Protection degree	IP20	Rated voltage	300 V
Surge voltage category	III		

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Technical data

Further details of approvals / standards

Standards	DIN EN 50178, IEC 62314, UL508	Certificate no. (cULus)	E223474
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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 ²	Clamping range, min.	0.5 mm ²
Clamping range, max.	4 mm ²	Wire connection cross section AWG, min.	AWG 20
Wire connection cross section AWG, max.	AWG 12	Wire cross-section, solid, min.	0.5 mm ²
Wire cross-section, solid, max.	4 mm ²	Wire connection cross section, finely stranded, min.	0.5 mm ²
Wire connection cross section, finely stranded, max.	2.5 mm ²	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 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.	0.5 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm ²	Blade size	0.6 x 3.5 mm

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	E223474

Downloads

Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Beipackzettel / Package Insert – multilingual

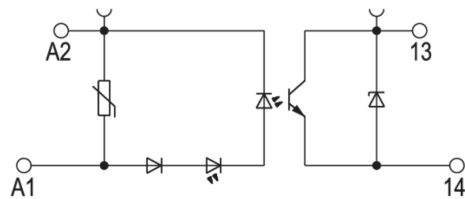
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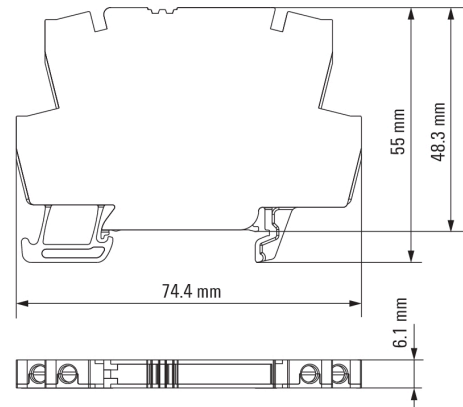
Drawings

Wiring diagram



Schaltsymbol

Dimensional drawing



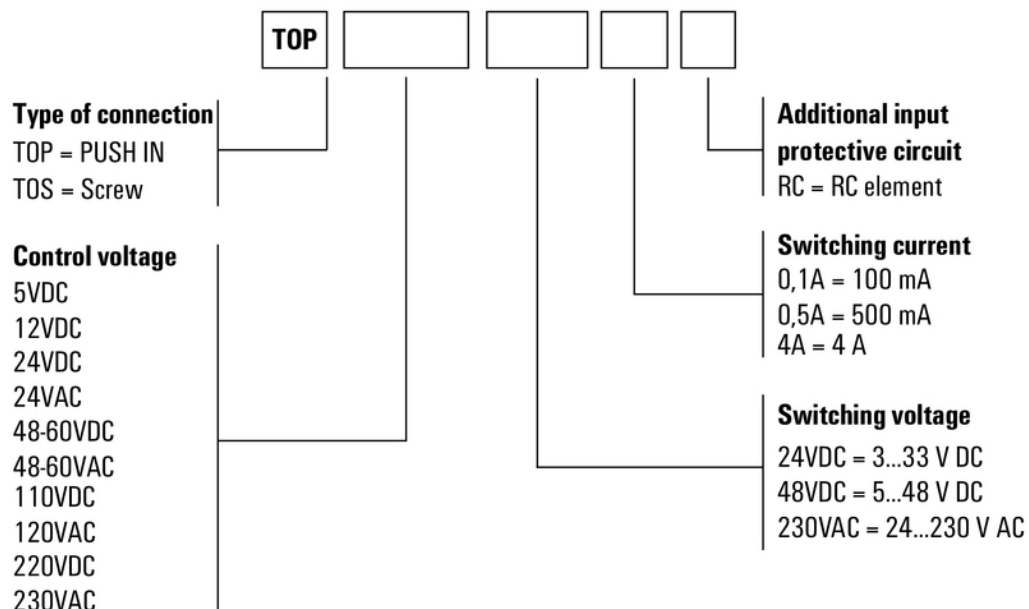
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Drawings

Miscellaneous



Type codes