

TOS 24VDC/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: 24 V DC $\pm 20\%$, Rated switching voltage: 5...48 V DC, Continuous current: 0.5 A, Screw connection
Order No.	8950920000
Type	TOS 24VDC/48VDC 0,5A
GTIN (EAN)	4032248742288
Qty.	10 pc(s).

Creation date November 26, 2024 12:32:17 PM CET

Catalogue status 26.11.2024 / 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
Width	6.1 mm	Width (inches)	0.24 inch
Net weight	20.9 g		

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 a
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Control side

Rated control voltage	24 V DC $\pm 20\%$	Nominal control current	7 mA DC
Power rating	≤ 170 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	$< 20\ \mu\text{s}$
Switch-off delay	$\leq 600\ \mu\text{s}$	Voltage drop at max. load	$< 1\ \text{V}$
Leakage current	$< 10\ \mu\text{A}$	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

Rail	TS 35	
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	$> 3\ \text{mm}$
Dielectric strength for control side - load side	1.2 kV _{eff} / 1 min.	Impulse withstand voltage	4 kV (1.2/50 μs)
Protection degree	IP20		

Further details of approvals / standards

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
ETIM 8.0	EC001504	ETIM 9.0	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
ECLASS 12.0	27-37-16-04	ECLASS 13.0	27-37-16-04
ECLASS 14.0	27-37-16-04		

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

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E223474

Downloads

Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
User Documentation	Beipackzettel / Package Insert – multilingual
Catalogues	Catalogues in PDF-format
Brochures	

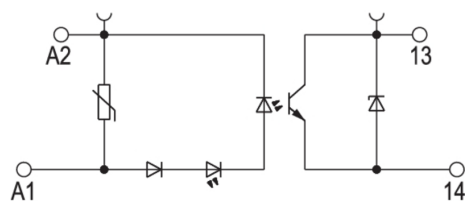
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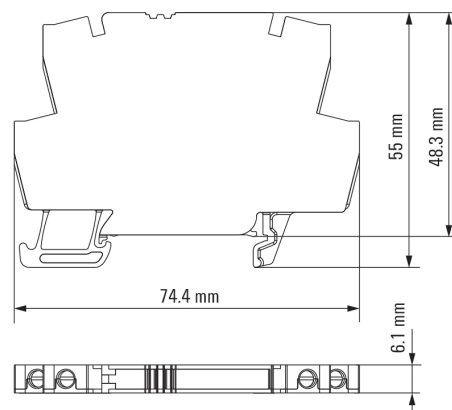
Drawings

Wiring diagram



Schaltsymbol

Dimensional drawing



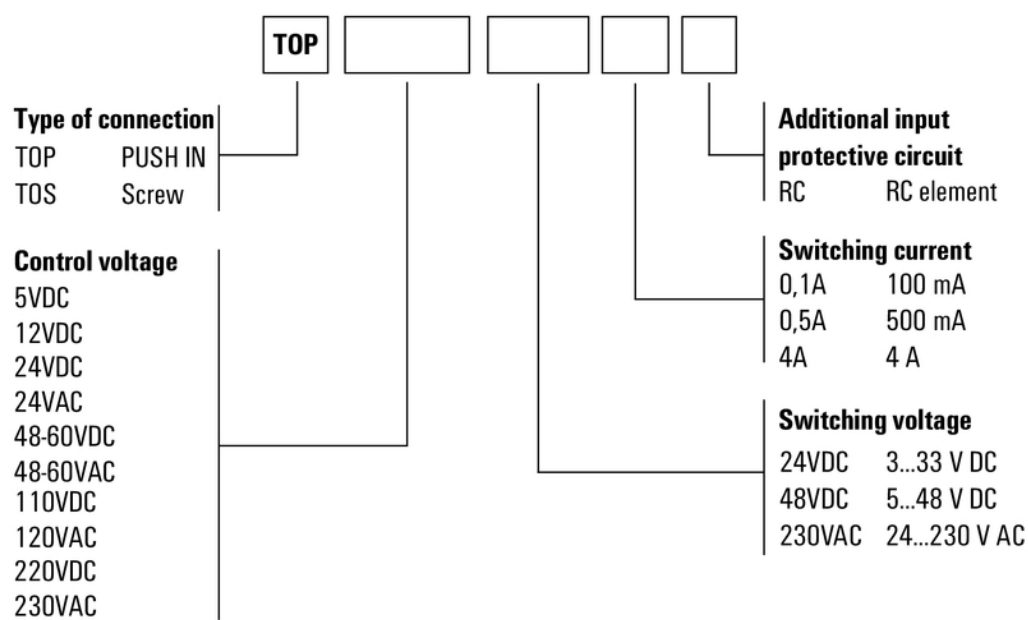
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Drawings

Miscellaneous



Type codes