

TOS 24VDC/48VDC 0,1A

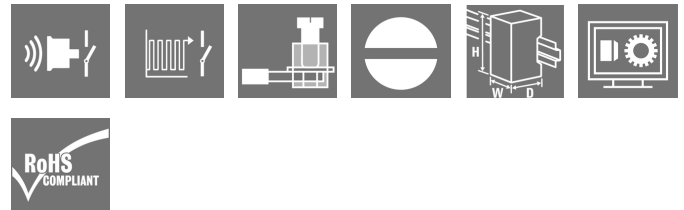
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Wear-free potential isolation in terminal block format
In many applications, it is essential that relays for potential isolation and signal adjustment perform their tasks reliably and permanently. Instead of wear-prone electromechanical solutions, maintenance-free solid-state relays with integrated potential isolation are increasingly being used. TERMOPTO solid-state relays in terminal block format are the perfect solution for the simple and reliable decoupling of digital signals. Besides their particularly compact design, they are distinguished by their PUSH IN connection system, plug-in cross-connections and an optimal price/performance ratio. With TERMOPTO solid-state relays, you save space in the panel, reduce your service costs and sustainably increase plant availability. You also reduce the complexity of the required accessories as you can use components from the Weidmüller portfolio, from cross-connectors to markers.

- 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: 100 mA, Screw connection
Order No.	8950720000
Type	TOS 24VDC/48VDC 0,1A
GTIN (EAN)	4032248742097
Qty.	10 pc(s).

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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	20.7 g		

Temperatures

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

Probability of failure

MTTF	2,500 Years		
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1	SCIP	9e2cbc49-76d9-4611-b8ec-5b4f549a0aa9
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Control side

Rated control voltage	24 V DC ±20 %	Nominal control current	7 mA DC
Power rating	≤ 170 mW	Pull-in/drop-out voltage, typ.	19.2 V / 6 V DC
Status indicator	Green LED	Protective circuit	Varistor, Reverse polarity protection

Load side

Rated switching voltage	5...48 V DC	Continuous current	100 mA
Rated switching current	100 mA	Load category	DC1
Switch-on delay	< 13 µs	Switch-off delay	< 42 µs
Voltage drop at max. load	< 1 V	Leakage current	< 10 µA
Min. switching current	100 µA	Short-circuit-proof	No
Protective circuit, load side	Free-wheeling diode	Contact type	1 NO contact (Transistor)
max. switching frequency (DC control voltage)	3,000 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 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		

Creation date September 18, 2022 4:02:37 AM CEST

Catalogue status 09.09.2022 / We reserve the right to make technical changes.

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Technical data

Further details of approvals / standards

Standards	IEC 623 14, 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
ETIM 8.0	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

Approvals

Approvals



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

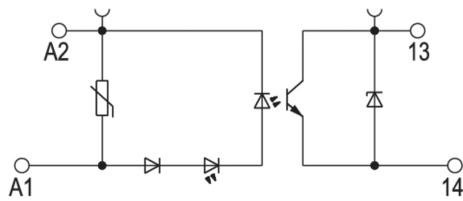
Downloads

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

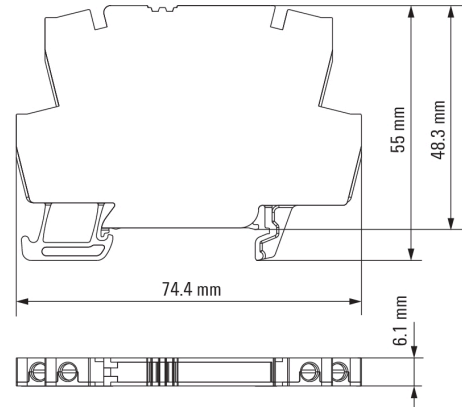
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Drawings**Wiring diagram**

Schaltsymbol

Dimensional drawing

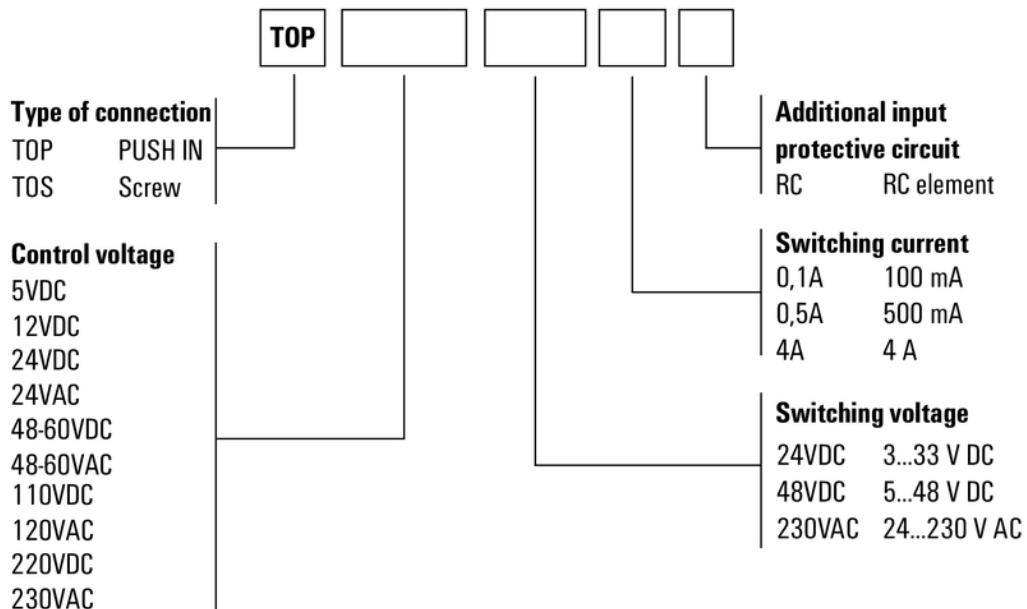
Data sheet

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Drawings

Miscellaneous



Type codes

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

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