

TERMOPTO TOS 24VDC/48VDC 0,1A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16

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TERMOPTO solid-state-relay 5 to 48 V DC 0.1 A output version,

with AC or DC input, available in different versions:

- With screw connection
- In 6.1 mm width
- With various input protection circuits (free-wheel diode, varistor)
- Pluggable cross-connections
- Enclosed design

General ordering data

Order No.	8950720000
Type	TOS 24VDC/48VDC 0,1A
Version	TERMOPTO, Solid-state relay, Rated control voltage: 24 V DC $\pm 20\%$, Rated switching voltage: 5...48 V DC, Rated switching current: 100 mA, Screw connection
GTIN (EAN)	4032248742097
Qty.	10 pc(s).

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Technical data
Dimensions and weights

Width	6.1 mm	Height	74.5 mm
Depth	55 mm	Net weight	20.7 g

Temperatures

Humidity	5–95% rel. humidity, $T_u = 40^\circ\text{C}$, no condensation	Operating temperature	-20 °C...+60 °C
Storage temperature	-40 °C...+80 °C		

Probability of failure

MTTF	2,500 Years
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control side

Rated control voltage	24 V DC $\pm 20\%$	Nominal control current	7 mA DC
Power rating	≤ 170 mW	Input frequency	< 3000 Hz
Cut-in (switch-on) voltage	≥ 19.2 V DC	Dropout voltage	≤ 9.6 V DC
Protective circuit, control side	Varistor, rev. polarity protection	Status display on control side	Green LED

Load side

Solid-state type	Transistor	Rated switching voltage	5...48 V DC
Continuous current	100 mA	Rated switching current	100 mA
Switch-on delay	< 13 μs	Switch-off delay	< 42 μs
Load category	DC1	Leakage current	< 10 μA
Protective circuit, load side	Integrated free-wheel diode	Voltage drop at max. load	< 1 V
Load side status indicator	No	Short-circuit-proof	No

General data

Solid-state type	Transistor	No. of poles	1
Wire connection method	Screw connection	Humidity	5–95% rel. humidity, $T_u = 40^\circ\text{C}$, no condensation
UL 94 flammability rating	V-0	Standards	DIN EN 50178, IEC 62314, UL508

Insulation coordination

Rated voltage	300 V	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	Surge voltage category	III

Further details of approvals

Standards	DIN EN 50178, IEC 62314, UL508
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Technical data**Connection data**

Clamping range, rated connection	2.5 mm ²	Clamping range, rated connection, max.	4 mm ²
Clamping range, rated connection, min.	0.5 mm ²	Stripping length, rated connection	9 mm
Tightening torque, max.	0.6 Nm	Tightening torque, min.	0.4 Nm
Wire connection method	Screw connection	Wire cross-section, finely stranded, max. (AWG)	AWG 12
Wire cross-section, finely stranded, min. (AWG)	AWG 20	Wire cross-section, finely stranded, two clampable wires, max.	1.5 mm ²

Classifications

ETIM 3.0	EC001504	eClass 5.1	27-27-09-90
eClass 6.2	27-27-09-90	eClass 7.1	27-27-09-90

Approvals

Approvals



ROHS

Conform

Downloads

Declaration of Conformity	K305_02_11.pdf
EPLAN	8950720000.ema
3-D model	

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Drawings**Electric symbol****12...220 DC**