

MOS 24VDC/12-300VDC 1A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Compact and powerful solid-state relays in terminal block format

Saving space in the panel is becoming more and more important, and requires increasingly compact components. With the compact and powerful MICROOPTO solid-state relays, you benefit from our decades of experience in manufacturing products in terminal block format. The MICROOPTO family comprises high-quality solid-state relays for applicationspecific problem solving and delivers high performance in a width of just 6.1 mm. The wide range of accessories from plug-in cross-connections to end-to-end marking solutions makes it particularly versatile. Thanks to international approvals, they can be used worldwide. Reliable function is ensured by the integrated protective suppressor circuit for inputs and outputs. The wide MICROOPTO portfolio includes a range of solutions for special loads. For example, for inductive loads up to 10 A at 24 V DC or for DC loads up to 300 V. In addition, there are solutions for decoupling 5 V TTL inputs and outputs, for frequencies up to 550 kHz, as well as the single CO contact version for inverting signals.

General ordering data

Version	MICROOPTO, solid-state relays, 1 NO contact (POWER MOS-FET), Rated control voltage: 24 V DC $\pm 20\%$, Rated switching voltage: 12...300 V DC, Continuous current: 1 A, Screw connection
Order No.	8937830000
Type	MOS 24VDC/12-300VDC 1A
GTIN (EAN)	4032248716050
Qty.	1 pc(s).

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Technical data**Dimensions and weights**

Depth	97.8 mm	Depth (inches)	3.85 inch
Height	88.1 mm	Height (inches)	3.468 inch
Net weight	37 g	Width	6.1 mm
Width (inches)	0.24 inch		

Temperatures

Storage temperature	-40 °C...80 °C	Operating temperature	-25 °C...60 °C
Humidity	5-95% relative humidity, T _u = 55°C, without condensation		

Probability of failure

MTTF	467 Years
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Control side

Power rating	0.36 W	Protective circuit	Varistor, Reverse polarity protection
Pull-in/drop-out voltage, typ.	18.8 V / 14.7 V DC	Rated control voltage	24 V DC ± 20 %
Status indicator	Green LED		

Load side

Continuous current	1 A	Leakage current	< 1 µA
Load category	LC A	Max. switching current	1,5 A
Protective circuit, load side	Varistor, Free-wheeling diode	Pulse load, max. current	27 A (10 ms)
Rated switching voltage	12...300 V DC	Short-circuit-proof	No
Switch-off delay	≤ 1 ms	Switch-on delay	≤ 18 µs
Voltage drop at max. load	≤ 0.4 V	max. switching frequency (DC control voltage)	60 Hz

Contact data

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

Rail	TS 35	
Colour	black	
UL 94 flammability rating	V-0	
UL94 flammability rating component	Component	Housing
	UL94 flammability rating	V-0

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Insulation coordination

Clearance and creepage distances for control side - load side	> 3 mm	Dielectric strength for control side - load side	3 KV _{eff} / 1 Min.
Dielectric strength to mounting rail	4 kV _{eff} / 1 Min.	Impulse withstand voltage	2.5 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, GL 2003-VI-Abs. 9, IEC 62314, UL508	Certificate No. (DNVGL)	TAE000033E
Certificate No. (GERMLLOYD)	54853-08	Certificate no. (cULus)	E141197

Connection data

Wire connection method	Screw connection	Stripping length, rated connection	7 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 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 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

Important note

Product information	The cable lengths must not exceed 30 m.
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Approvals

Approvals



ROHS	Conform
UL File Number Search	E141197

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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
User Documentation	Beipackzettel / Package Insert – multilingual

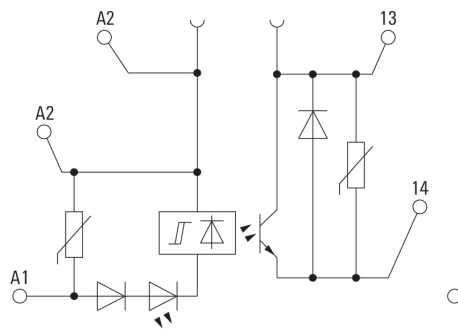
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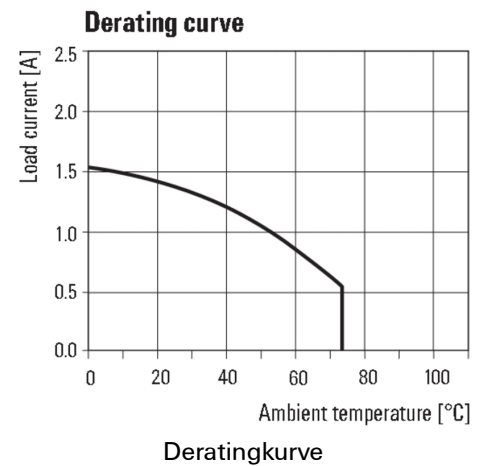
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Drawings

Wiring diagram



Graph



Dimensional drawing

