

## MICROOPTO MOS 24VDC/8-30VDC 2A

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
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The MICROOPTO SOLENOID solid-state relay is used especially as a switching amplifier for actuators up to 24 V DC and 10 A with inductive loads such as solenoid valves and contactors. 3-wire actuators can be connected directly to the module.

This is short-circuit proof and protected against application-related transients and spikes by extensive protective circuitry.

### General ordering data

Type	MOS 24VDC/8-30VDC 2A
Order No.	<a href="#">8937970000</a>
Version	MICROOPTO, solid-state relays, 1 NO contact (Intelligent POWER MOS-FET), Rated control voltage: 24 V DC $\pm 20\%$ , Rated switching voltage: 8...30 V DC, Continuous current: 2 A, Screw connection
GTIN (EAN)	4032248716203
Qty.	1 pc(s).

## Data sheet

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## Technical data

### Dimensions and weights

Width	6.1 mm	Width (inches)	0.24 inch
Height	88.1 mm	Height (inches)	3.468 inch
Depth	97 mm	Depth (inches)	3.819 inch
Net weight	35.81 g		

### Temperatures

Humidity	5-95% relative humidity, T <sub>u</sub> = 55°C, without condensation	Operating temperature, max.	60 °C
Operating temperature, min.	-25 °C	Storage temperature, max.	80 °C
Storage temperature, min.	-40 °C	Operating temperature	-25 °C...60 °C
Storage temperature	-40 °C...80 °C		

### Probability of failure

MTTF	847 Years
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### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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### Control side

Rated control voltage	24 V DC ±20 %	Power rating	≤ 170 mW
Cut-in / dropout voltage	13.8 V / 13.6 V DC	Protective circuit	Varistor, Reverse polarity protection

### Load side

Rated switching voltage	8...30 V DC	Continuous current	2 A
Max. switching current	4 A	Load category	LC A
Switch-on delay	0.1 ms	Switch-off delay	< 0.5 ms
Voltage drop at max. load	≤ 50 mV	Leakage current	< 10 µA
Min. switching current	100 µA	Short-circuit-proof	Yes (thermal cut-out)
Load side status indicator	LED green, output switched, LED red, short- circuit /overload at the output	Protective circuit, load side	Varistor, Free-wheeling diode
max. switching frequency (DC control voltage)	125 Hz	Nominal auxiliary voltage	8...30 V DC / max. 6 mA

### Contact data

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

Version	with functional earth connection	Rail	TS 35
Colour	black	UL 94 flammability rating	V-0

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**Technical data**
**Insulation coordination**

Rated voltage	30 V	Pollution severity	2
Surge voltage category	III	Dielectric strength for control side - load side	350 V <sub>eff</sub> / 1 min.
Dielectric strength to mounting rail	350 V <sub>eff</sub> / 1 min.	Impulse withstand voltage	500 V (1,2/50 µ)
Protection degree	IP20		

**Further details of approvals / standards**

Standards	DIN EN 50178, GL 2003-VI-Abs. 9, IEC 62314, UL508	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 <sup>2</sup>	Clamping range, min.	0.5 mm <sup>2</sup>
Clamping range, max.	4 mm <sup>2</sup>	Wire cross-section, solid, min.	0.5 mm <sup>2</sup>
Wire cross-section, solid, max.	4 mm <sup>2</sup>	Wire connection cross-section, finely stranded, min.	0.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm <sup>2</sup>	Blade size	0.6 x 3.5 mm

**Ratings IECEx/ATEX/cUL**

Certificate no. (cULus)	E141197
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**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	UNSPSC	30-21-18-01

**Product information**

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

Approvals



ROHS	Conform
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**Technical data****Downloads**

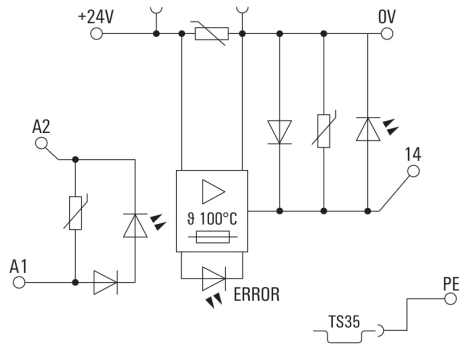
Approval/Certificate/Document of Conformity	<a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
Brochure/Catalogue	<a href="#">CAT 4.2 ELECTR 18/19 EN</a>
Engineering Data	<a href="#">EPLAN, WSCAD</a>
Engineering Data	<a href="#">STEP</a>
User Documentation	<a href="#">Beipackzettel / Package Insert – multilingual</a>

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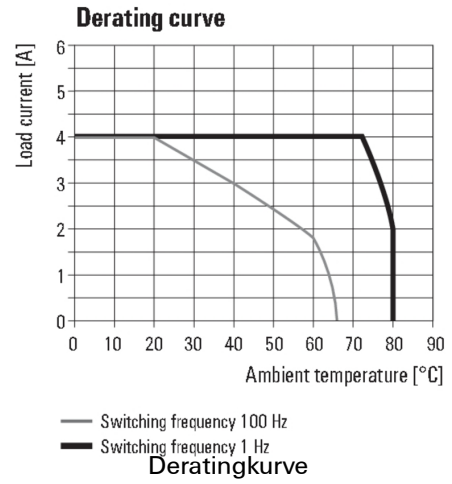
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**Drawings**

**Wiring diagram**



**Graph**



**Dimensional drawing**

