

## MICROOPTO MOS 12-28VDC/5VTTL

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
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To adjust sensitive TTL signals to the typical voltage level of 24 V DC used in industrial automation applications, the MICROOPTO TTL modules are used. For the protection of the electronics, the sensitive TTL signals require electrical isolation from the 24 V world. To control the opto circuit via the 5 V TTL signal, an additional auxiliary voltage is fed in.

### General ordering data

Type	MOS 12-28VDC/5VTTL
Order No.	<a href="#">8937930000</a>
Version	MICROOPTO, Solid-state relay, Rated control voltage: 12 V DC...28 V DC, Rated switching voltage: 5 V TTL, Rated switching current: 50 mA, Screw connection
GTIN (EAN)	4032248716166
Qty.	1 pc(s).

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**Technical data**
**Dimensions and weights**

Width	6.1 mm	Height	88 mm
Depth	98 mm	Net weight	34 g

**Temperatures**

Humidity	40 °C / 93 % rel. humidity, no condensation	Operating temperature	-25 °C...+60 °C
Storage temperature	-40 °C...+60 °C		

**Probability of failure**

MTTF	2,047 Years
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**control side**

Rated control voltage	12 V DC...28 V DC	Power rating	150 mW
Input frequency	100 kHz	Cut-in (switch-on) voltage	> 10.7 V
Dropout voltage	< 10.6 V	Protective circuit, control side	Varistor, rev. polarity protection
Status display on control side	Green status LED	Rated auxiliary voltage	5 V DC ±5 %

**Load side**

Solid-state type	TTL	Rated switching voltage	5 V TTL
Continuous current	max. 50 mA	Rated switching current	50 mA
Switch-on delay	typical. < 1 µs	Switch-off delay	typical. < 4 µs
Load category	LC A	Leakage current	< 1 µA
Protective circuit, load side	Varistor	Voltage drop at max. load	90 mV
Short-circuit-proof	No	Rated auxiliary voltage	5 V DC ±5 %

**General data**

Solid-state type	TTL	No. of poles	1
Wire connection method	Screw connection	Humidity	40 °C / 93 % rel. humidity, no condensation
UL 94 flammability rating	V-0	Standards	DIN EN 50178, GL 2003- VI-Abs. 9, 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 <sub>eff</sub> / 1 min.	Dielectric strength to mounting rail	1.2 kV <sub>eff</sub> / 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, GL 2003- VI-Abs. 9, IEC 62314, UL508
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**Data sheet**

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**Technical data**

**Connection data**

Clamping range, rated connection	2.5 mm <sup>2</sup>	Clamping range, rated connection, max.	4 mm <sup>2</sup>
Clamping range, rated connection, min.	0.5 mm <sup>2</sup>	Wire connection method	Screw connection

**Classifications**

ETIM 3.0	EC001504	UNSPSC	30-21-18-01
eClass 5.1	27-27-09-90	eClass 6.2	27-27-09-90
eClass 7.1	27-27-09-90		

**Product information**

Descriptive text accessories	Accessories and dimensioned drawings: refer to the MICROOPTO Accessories page.
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**Approvals**

Approvals



ROHS	Conform
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**Downloads**

Declaration of Conformity	<a href="#">K300_11_08.pdf</a>
EPLAN	<a href="#">8937930000.ema</a>
<a href="#">3-D model</a>	

**Data sheet**

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**Drawings**

**Electric symbol**

