

**MICROOPTO
MOS 5VTTL/24VDC 0,1A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

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Germany

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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 5VTTL/24VDC 0,1A
Order No.	8937920000
Version	MICROOPTO, solid-state relays, 1 NO contact (Bipolar transistor), Rated control voltage: 5 V TTL, Rated switching voltage: 24 VDC $\pm 20\%$, Continuous current: 100 mA, Screw connection
GTIN (EAN)	4032248716159
Qty.	1 pc(s).

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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	97.8 mm	Depth (inches)	3.85 inch
Net weight	34.8 g		

Temperatures

Humidity	5 - 93% rel. humidity, Tu = 40°C, no condensation	Operating temperature, max.	60 °C
Operating temperature, min.	-25 °C	Storage temperature, max.	60 °C
Storage temperature, min.	-40 °C	Operating temperature	-25 °C...60 °C
Storage temperature	-40 °C...60 °C		

Probability of failure

MTTF	1,686 Years
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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Control side

Rated control voltage	5 V TTL	Nominal control current	< 100 µA
Power rating	< 0.5 mW	Cut-in / dropout voltage	2 V / 1 V DC
Status indicator	Green LED	Protective circuit	Varistor, Reverse polarity protection
Nominal auxiliary voltage	5 V DC ± 5 % / HIGH: max. 9 mA, LOW: max 400 µA		

Load side

Rated switching voltage	24 VDC ±20%	Continuous current	100 mA
Rated switching current	100 mA	Load category	LC A
Switch-on delay	< 1.3 µ	Switch-off delay	< 1 µs
Voltage drop at max. load	< 1 V	Leakage current	< 20 µA
Short-circuit-proof	No	Protective circuit, load side	Free-wheeling diode
max. switching frequency (DC control voltage)	100 kHz	Nominal auxiliary voltage	24 V DC ± 20 % / max. 110 mA

Contact data

Contact type	1 NO contact (Bipolar transistor)
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General data

Rail	TS 35	Colour code	black
UL 94 flammability rating	V-0		

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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	3 kV _{eff} / 1 min.	Dielectric strength to mounting rail	4 kV _{eff} / 1 min.
Impulse withstand voltage	4 kV (1.2/50 µs)	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 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 3.0	EC001504	ETIM 4.0	EC001504
ETIM 5.0	EC001504	ETIM 6.0	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
eClass 8.1	27-27-09-90	eClass 9.0	27-37-16-04
eClass 9.1	27-37-16-04		

Product information

Product information	The cable lengths must not exceed 30 m.
Instructions for accessories	Accessories and dimensioned drawings: refer to the MICROOPTO Accessories page.

Approvals

Approvals



ROHS

Conform

Creation date March 28, 2019 7:35:07 PM CET

Catalogue status 15.03.2019 / We reserve the right to make technical changes.

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Downloads

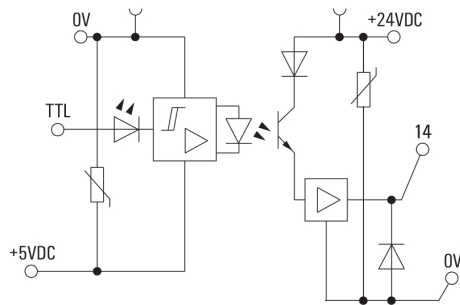
Approval/Certificate/Document of Conformity	DE_PA5600_160302_001.pdf
Brochure/Catalogue	CAT 4.2 ELECTR 18/19 EN
Engineering Data	EPLAN, WSCAD
Engineering Data	STEP
User Documentation	Operating Instructions

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Drawings

Wiring diagram



Dimensional drawing

