

## MOS 5VTTL/24VDC 0,1A

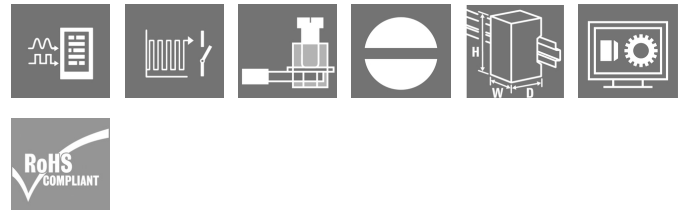
**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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 relay, Rated control voltage: 5 V TTL , Rated switching voltage: 24 VDC $\pm 20\%$ , Continuous current: 100 mA, Screw connection
Order No.	<a href="#">8937920000</a>
Type	MOS 5VTTL/24VDC 0,1A
GTIN (EAN)	4032248716159
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
Width	6.1 mm	Width (inches)	0.24 inch
Net weight	34.8 g		

### Temperatures

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

### Probability of failure

MTTF	1,686 a
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### Control side

Rated control voltage	5 V TTL	Nominal control current	< 100 µA
Power rating	< 0.5 mW	Pull-in/drop-out voltage, typ.	2 V / 1 V DC
Status indicator	Green LED	Protective circuit	Varistor, Reverse polarity protection
Input frequency	100 kHz	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
Max. switching voltage, AC	250 V	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	Contact type	1 NO contact (Bipolar transistor)
max. switching frequency (DC control voltage)	100 kHz	Nominal auxiliary voltage	24 V DC ± 20 % / max. 110 mA

### General data

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

### 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 <sub>eff</sub> / 1 Min.	Dielectric strength to mounting rail	4 kV <sub>eff</sub> / 1 Min.
Impulse withstand voltage	4 kV (1.2/50 µs)	Protection degree	IP20

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**Technical data****Further details of approvals / standards**

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

**Classifications**

ETIM 6.0	EC001504	ETIM 7.0	EC001504
ETIM 8.0	EC001504	ETIM 9.0	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
ECLASS 12.0	27-37-16-04	ECLASS 13.0	27371604

**Environmental Product Compliance**

REACH SVHC	Lead 7439-92-1
SCIP	d32f8e61-6733-45d6-9062-c95f9903aad6

**Important note**

Product information The cable lengths must not exceed 30 m.

**Approvals**

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197

**Downloads**

Approval/Certificate/Document of Conformity	<a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
User Documentation	<a href="#">Beipackzettel / Package Insert – multilingual</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

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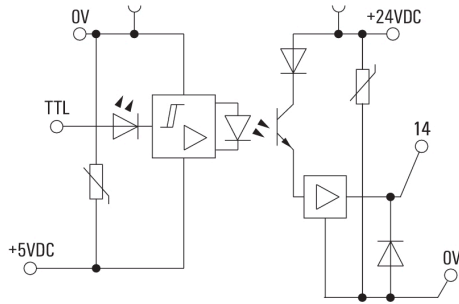
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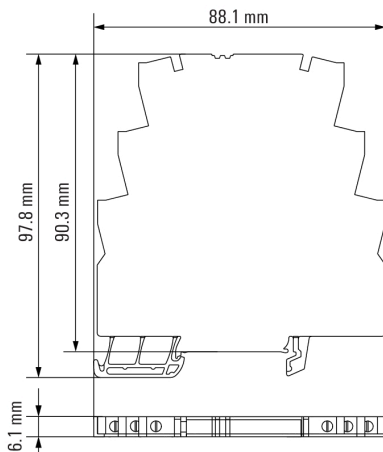
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**Drawings**

**Wiring diagram**



**Dimensional drawing**



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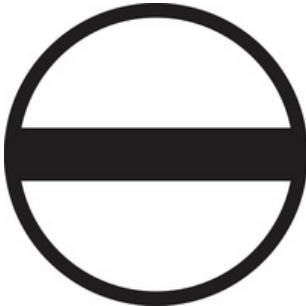
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**Accessories****Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

**General ordering data**

Type	SDS 0.6X3.5X100	Version
Order No.	<a href="#">2749340000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118895568	
Qty.	10 pc(s).	

**Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

**General ordering data**

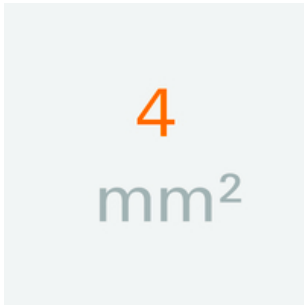
Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">2749810000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118897012	
Qty.	1 pc(s).	

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## Accessories

4 mm<sup>2</sup>

The plug-in cross-connections feature easy handling and quick installation. This saves a great deal of time during installation in comparison with screwed solutions.

## General ordering data

Type	ZQV 4N/20 SW	Version
Order No.	<a href="#">1909120000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535804	
Qty.	20 pc(s).	
Type	ZQV 4N/2 SW	Version
Order No.	<a href="#">1793970000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233762	
Qty.	60 pc(s).	
Type	ZQV 4N/10 SW	Version
Order No.	<a href="#">1794060000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248234059	
Qty.	20 pc(s).	
Type	ZQV 4N/20 GE	Version
Order No.	<a href="#">1909020000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535644	
Qty.	20 pc(s).	
Type	ZQV 4N/20 RT	Version
Order No.	<a href="#">1909150000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535934	
Qty.	20 pc(s).	
Type	ZQV 4N/20 BL	Version
Order No.	<a href="#">1909100000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535774	
Qty.	20 pc(s).	
Type	ZQV 4N/3 SW	Version
Order No.	<a href="#">1794000000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233793	
Qty.	60 pc(s).	
Type	ZQV 4N/4 SW	Version
Order No.	<a href="#">1794030000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233915	
Qty.	60 pc(s).	

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## Accessories

## Blank



WS markers are the perfect match for the W-series connectors. Thanks to their system compatibility, the WS tags can also be used with the I-series and the Z-series. The large marking surfaces do not only permit long character strings but also multi-line text. WS markers are ideal for labels with long, customised character strings. Thanks to the proven MultiCard format, printing with PrintJet CONNECT oder/or Plotter is possible.

- Can be fitted in strips or individually
- Markers in proven MultiCard format

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

## General ordering data

Type	WS 12/6 MC NE WS	Version
Order No.	<a href="#">1609900000</a>	WS, Terminal marker, 12 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4008190203467	Allen-Bradley, white
Qty.	600 pc(s).	

## MICROOPTO



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## General ordering data

Type	MOS SUPPLY	Version
Order No.	<a href="#">8973460000</a>	MICROOPTO, Supply module, Screw connection
GTIN (EAN)	4032248799541	
Qty.	1 pc(s).	

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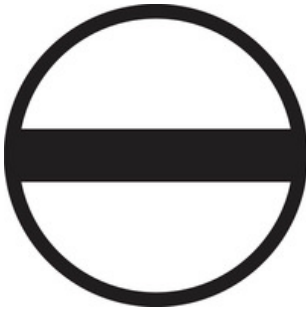
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**Accessories**

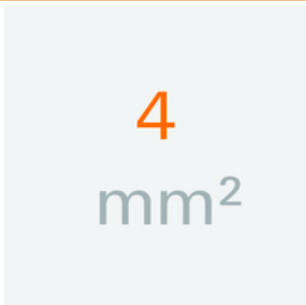
Type	MOS FEED THROUGH	Version
Order No.	<a href="#">8973450000</a>	MICROOPTO, Feed-through terminal, Screw connection
GTIN (EAN)	4032248799534	
Qty.	1 pc(s).	

**Slotted screwdriver**

VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

**General ordering data**

Type	SDIS SLIM 0.6X3.5X100	Version
Order No.	<a href="#">2749610000</a>	Mounting tool, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118896350	
Qty.	1 pc(s).	

**4 mm<sup>2</sup>**

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**General ordering data**

Type	ZQV 4N/10
Order No.	<a href="#">1528090000</a>
GTIN (EAN)	4050118332896
Qty.	20 pc(s).

Type	ZQV 4N/4 RD
Order No.	<a href="#">2460800000</a>
GTIN (EAN)	4050118476224
Qty.	60 pc(s).

Type	ZQV 4N/4 BL
Order No.	<a href="#">1528120000</a>
GTIN (EAN)	4050118332872
Qty.	60 pc(s).

Type	ZQV 4N/2 BL
Order No.	<a href="#">1528040000</a>
GTIN (EAN)	4050118332773
Qty.	60 pc(s).

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## Accessories

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Type	ZQV 4N/3
Order No.	<a href="#">1527940000</a>
GTIN (EAN)	4050118332865
Qty.	60 pc(s).

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Type	ZQV 4N/10 BL
Order No.	<a href="#">1528230000</a>
GTIN (EAN)	4050118333138
Qty.	20 pc(s).

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Type	ZQV 4N/3 BL
Order No.	<a href="#">1528080000</a>
GTIN (EAN)	4050118333008
Qty.	60 pc(s).

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Type	ZQV 4N/10 RD
Order No.	<a href="#">2460740000</a>
GTIN (EAN)	4050118476163
Qty.	20 pc(s).

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Type	ZQV 4N/3 RD
Order No.	<a href="#">2460810000</a>
GTIN (EAN)	4050118476231
Qty.	60 pc(s).

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Type	ZQV 4N/2
Order No.	<a href="#">1527930000</a>
GTIN (EAN)	4050118332766
Qty.	60 pc(s).

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Type	ZQV 4N/4
Order No.	<a href="#">1527970000</a>
GTIN (EAN)	4050118332889
Qty.	60 pc(s).

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Type	ZQV 4N/2 RD
Order No.	<a href="#">2460450000</a>
GTIN (EAN)	4050118476149
Qty.	60 pc(s).

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