

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

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

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Germany

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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

Order No.	<a href="#">8937970000</a>
Type	MOS 24VDC/8-30VDC 2A
Version	MICROOPTO, Solid-state relay, Rated control voltage: 24 V DC $\pm 20\%$ , Rated switching voltage: 8...30 V DC, Rated switching current: 4 A, Screw connection
GTIN (EAN)	4032248716203
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	35.81 g

**Temperatures**

Operating temperature	-20 °C... vgl. Derating	Storage temperature	-40 °C...+80 °C
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**Probability of failure**

MTTF	847 Years
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**Connection data**

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

**Control side**

Rated control voltage	24 V DC ±20 %	Power rating	≤ 170 mW
Input frequency	125 Hz	Cut-in (switch-on) voltage	> 13.8 V
Dropout voltage	< 13.6 V	Protective circuit, control side	Varistor, rev. polarity protection

**Load side**

Rated switching voltage	8...30 V DC	Continuous current	2 A
Rated switching current	4 A	Switch-on delay	0.1 ms
Switch-off delay	< 0.5 ms	Load category	LC A
Leakage current	< 10 µA	Protective circuit, load side	Varistor, integrated free-wheel diode
Voltage drop at max. load	≤ 50 mV	Load side status indicator	Error message, red LED; status, green LED
Short-circuit-proof	Yes (thermal cut-out)		

**General data**

Solid-state type	Intelligent POWER MOS-FET	No. of poles	1
Conductor connection system	Screw connection	Humidity	5...95 % rel. humidity T <sub>u</sub> = 55°C, no condensation
UL 94 flammability rating	V-0	Standards	DIN EN 50178, GL 2003-VI-Abs. 9, IEC 62314, UL508

**Insulation coordination**

Rated voltage	30 V	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)
Rated impulse withstand voltage	500 V (1.2/50 µs)	Pollution severity	2
Surge voltage category	II		

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**Technical data****Further details of approvals**

Standards DIN EN 50178, GL 2003-  
VI-Abs. 9, IEC 62314,  
UL508

**Classifications**

ETIM 3.0	EC001504	UNSPSC	30-21-18-01
eClass 5.1	27-27-09-90	eClass 6.0	27-27-09-90
eClass 7.0	27-27-09-90		

**Approvals**

Approvals

**Downloads**

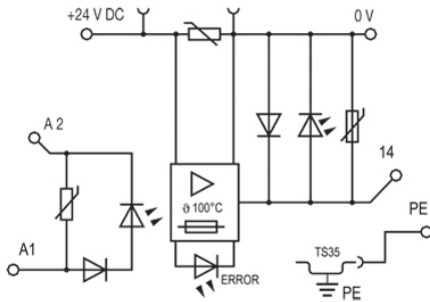
Declaration of Conformity [K300\\_11\\_08.pdf](#)  
EPLAN [8937970000.ema](#)  
[3-D model](#)

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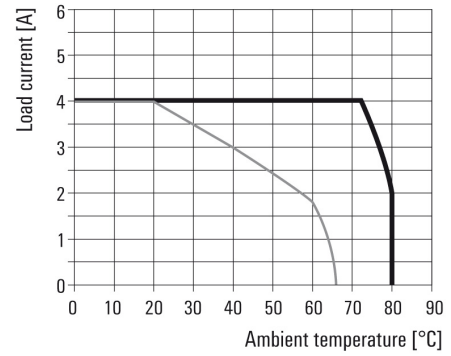
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**Drawings**

**Electric symbol**

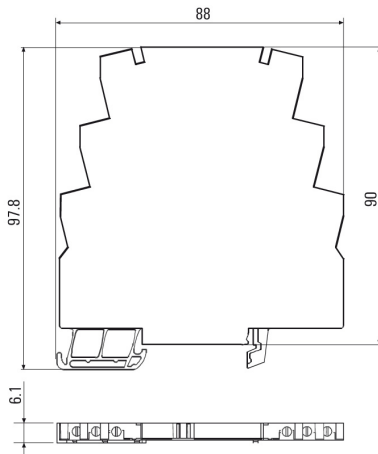


**Derating curve**



— Switching frequency 100 Hz  
 — Switching frequency 1 Hz

**Derating curve**



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**Accessories**
**Blank**


**WS markers** are the perfect match for the connectors of the W series. But thanks to their system compatibility the WS tags can also be used with the I series and the Z series. The large areas for printing permit not only long character strings but also multiple lines.

**WS markers** are ideal for labels with long, bespoke character strings. The tried-and-tested MultiCard format means that printing can be carried out with **laser** printers, **PrintJet, plotters** or the **MC-Mobilo**.

- Can be fitted in strips or singly
- Markers in proven multicard format

**General ordering data**

Order No.	Type	Version	GTIN (EAN)	Qty.
<a href="#">1609900000</a>	WS 12/6 MC NE WS	Terminal markers, MultiCard, 12 x 6 mm, Polyamide, Colour: White	4008190203467	600 pc(s).

**ZQV 4N**


Weidmüller offers users of modular terminals of the Z-Series a comprehensive range of accessories that render possible appropriate solutions for all - even non-standard - tasks.

The accessories must comply with the same quality standards as the modular terminals themselves.

**General ordering data**

Order No.	Type	Version	GTIN (EAN)	Qty.
<a href="#">1758250000</a>	ZQV 4N/2 GE	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 2	4032248169795	60 pc(s).
<a href="#">1793960000</a>	ZQV 4N/2 BL	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 2	4032248233755	60 pc(s).
<a href="#">1794060000</a>	ZQV 4N/10 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 10	4032248234059	20 pc(s).
<a href="#">1762630000</a>	ZQV 4N/3 GE	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 3	4032248169788	60 pc(s).
<a href="#">1793970000</a>	ZQV 4N/2 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 2	4032248233762	60 pc(s).
<a href="#">1794010000</a>	ZQV 4N/4 RT	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 4	4032248233809	60 pc(s).

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### Accessories

<a href="#">1794000000</a> ZQV 4N/3 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 3	4032248233793 60 pc(s).
<a href="#">1794040000</a> ZQV 4N/10 RT	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 10	4032248234004 20 pc(s).
<a href="#">1794020000</a> ZQV 4N/4 BL	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 4	4032248233816 60 pc(s).
<a href="#">1794050000</a> ZQV 4N/10 BL	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 10	4032248234011 20 pc(s).
<a href="#">1793990000</a> ZQV 4N/3 BL	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 3	4032248233786 60 pc(s).
<a href="#">1794030000</a> ZQV 4N/4 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 4	4032248233915 60 pc(s).
<a href="#">1762620000</a> ZQV 4N/4 GE	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 4	4032248169771 60 pc(s).
<a href="#">1758260000</a> ZQV 4N/10 GE	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 10	4032248169764 20 pc(s).
<a href="#">1793950000</a> ZQV 4N/2 RT	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 2	4032248233748 60 pc(s).
<a href="#">1793980000</a> ZQV 4N/3 RT	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 3	4032248233779 60 pc(s).

### Accessories



The MICROOPTO range of products provide the user with the tried and tested characteristics of terminal blocks. Pluggable cross-connections and harmonised marking solutions packaged in a minimum design width. Best performance within a small footprint.

- 6.1 mm width
- Plug-in standard ZQV 4N cross-connection
- Suitable for labelling with the MultiCard system
- Suitable for mounting on TS35 rail
- Housing material made of WEMID (higher thermal stability in comparison with polyamide)

### General ordering data

Order No.	Type	Version	GTIN (EAN)	Qty.
<a href="#">8973450000</a>	MOS FEED THROUGH	MICROOPTO, Accessories, Screw connection	4032248799534	1 pc(s).
<a href="#">8973460000</a>	MOS SUPPLY	MICROOPTO, Accessories, Screw connection	4032248799541	1 pc(s).

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## Accessories

### Screwdrivers



#### Always the right tools:

Weidmüller screwdrivers are the result of a consistent grip concept which takes into account both the human hand and the different requirements when working. The right blade for every screw - with four different handle sizes

The advantages are obvious:

- User-friendly: ergonomic handle arrangement for effortless working progress
- Optimised connections: compatible blade and perfect handle size for maximum torque
- Reliable: even easier operation for even quicker wiring

The result: efficient, professional working progress.

#### General ordering data

Order No.	Type	Version	GTIN (EAN)	Qty.
<a href="#">9008330000</a>	SDS 0.6X3.5X100	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm	4032248056286	1 pc(s).

### QB 58, QB 75, uninsulated



Poles are easy to break off for contacts that do not require a connection.

Cross-connection, plain-cut (with insulation profile as electric-shock protection if required).

6.0 mm and 8.0 mm pitches

The mounting tolerances of the terminals must be taken into account.

#### General ordering data

Order No.	Type	Version	GTIN (EAN)	Qty.
<a href="#">0526760000</a>	ISPF QB75 RT	Accessories, Insulation profile	4008190157821	10 pc(s).
<a href="#">0526780000</a>	ISPF QB75 BL	Accessories, Insulation profile	4008190093105	10 pc(s).
<a href="#">0526700000</a>	ISPF QB75 SW	Accessories, Insulation profile	4008190093723	10 pc(s).
<a href="#">0535200000</a>	QB 75/6.2/15	SAK Series, Accessories, Cross-connector, for cross-connection link, No. of poles: 75	4008190179168	10 pc(s).