

MICROOPTO MOS 24VDC/5-33VDC 10A

Weidmüller Interface GmbH & Co. KG

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The MICROOPTO SOLENOID solid-state relay is used especially as switching amplifier for actuators up to 24 V DC and 10 A with inductive loads such as solenoid valves and contactors.

A potential-free signalling contact transmits errors, such as short circuit or overload, to the controller.

The MICROOPTO SOLENOID solid-state relay is short-circuit-proof and protected against power-related transients and voltage peaks by extensive protective circuits.

The closed housing also offers a high level of protection from touching.

General ordering data

Order No.	8937940000
Type	MOS 24VDC/5-33VDC 10A
Version	MICROOPTO, Solid-state relay, Rated control voltage: 24 V DC $\pm 20\%$, Rated switching voltage: 5...33 V DC, Rated switching current: 10 A, Screw connection
GTIN (EAN)	4032248716173
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	38.81 g

Temperatures

Operating temperature	-25 °C...+60 °C	Storage temperature	-40 °C...+60 °C
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Probability of failure

MTTF	399 Years
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Connection data

Clamping range, rated connection	2.5 mm ²	Clamping range, rated connection, min.	0.5 mm ²
Clamping range, rated connection, max.	4 mm ²		

Control side

Rated control voltage	24 V DC ±20 %	Power rating	400 mW
Input frequency	50 Hz	Cut-in (switch-on) voltage	> 18 V
Dropout voltage	< 13 V	Protective circuit, control side	Varistor, rev. polarity protection
Status display on control side	Error LED red; Status LED green		

Load side

Rated switching voltage	5...33 V DC	Continuous current	10 A
Rated switching current	10 A	Switch-on delay	typical. 250 µs
Switch-off delay	typical. 700 µs	Load category	LC A
Leakage current	< 1 mA	Protective circuit, load side	Current sensor, Varistor, integrated free-wheel diode
Voltage drop at max. load	approx. 100 mV	Load side status indicator	Error message, red LED; status, green LED
Short-circuit-proof	Resistance		

General data

Solid-state type	POWER MOS-FET	No. of poles	1
Conductor connection system	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
Alarm contact	5...48 V DC / 0.1 A		

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 _{eff} / 1 min.	Dielectric strength to mounting rail	1.2 kV _{eff} / 1 min.
Impulse withstand voltage	4 kV (1.2/50 µs)	Pollution severity	2
Surge voltage category	III		

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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

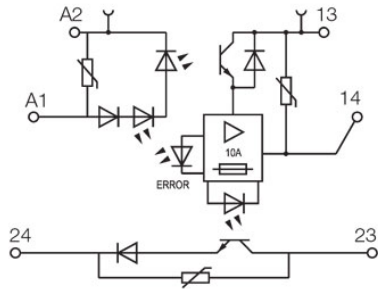
Declaration of Conformity [K300_11_08.pdf](#)
 EPLAN [8937940000.ema](#)
[3-D model](#)

**MICROOPTO
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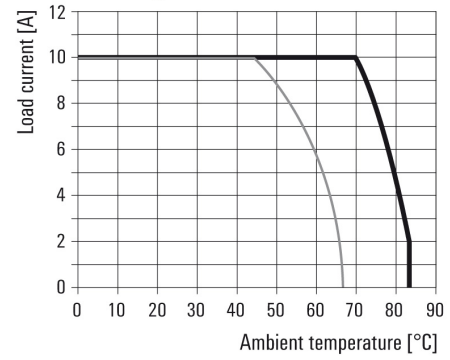
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Drawings

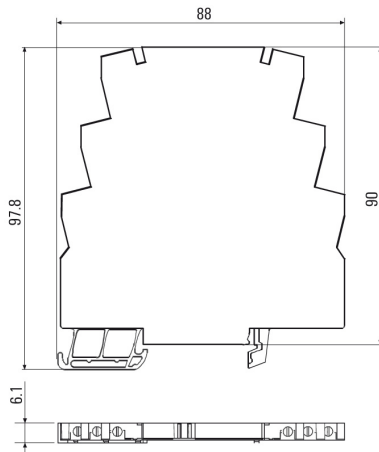
Electric symbol



Derating curve



— Switching frequency 50 Hz
— Switching frequency 1 Hz



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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.
1609900000	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.
1793960000	ZQV 4N/2 BL	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 2	4032248233755	60 pc(s).
1758250000	ZQV 4N/2 GE	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 2	4032248169795	60 pc(s).
1794060000	ZQV 4N/10 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 10	4032248234059	20 pc(s).
1793970000	ZQV 4N/2 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 2	4032248233762	60 pc(s).
1762630000	ZQV 4N/3 GE	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 3	4032248169788	60 pc(s).
1794000000	ZQV 4N/3 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 3	4032248233793	60 pc(s).

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Accessories

1794040000 ZQV 4N/10 RT	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 10	4032248234004 20 pc(s).
1794010000 ZQV 4N/4 RT	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 4	4032248233809 60 pc(s).
1794020000 ZQV 4N/4 BL	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 4	4032248233816 60 pc(s).
1794050000 ZQV 4N/10 BL	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 10	4032248234011 20 pc(s).
1793990000 ZQV 4N/3 BL	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 3	4032248233786 60 pc(s).
1794030000 ZQV 4N/4 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 4	4032248233915 60 pc(s).
1762620000 ZQV 4N/4 GE	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 4	4032248169771 60 pc(s).
1758260000 ZQV 4N/10 GE	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 10	4032248169764 20 pc(s).
1793950000 ZQV 4N/2 RT	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 2	4032248233748 60 pc(s).
1793980000 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.
8973450000	MOS FEED THROUGH	MICROOPTO, Accessories, Screw connection	4032248799534	1 pc(s).
8973460000	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.
9008330000	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.
0526760000	ISPF QB75 RT	Accessories, Insulation profile	4008190157821	10 pc(s).
0526780000	ISPF QB75 BL	Accessories, Insulation profile	4008190093105	10 pc(s).
0526700000	ISPF QB75 SW	Accessories, Insulation profile	4008190093723	10 pc(s).
0535200000	QB 75/6.2/15	SAK Series, Accessories, Cross-connector, for cross-connection link, No. of poles: 75	4008190179168	10 pc(s).