

## TERMOPTO TOS 5VDC/48VDC 0,5A

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com



TERMOPTO solid-state relay, 5 to 48 V DC 0.5 A output version,

with AC or DC input, available in different versions:

- With screw connection
- In 6.1 mm width
- With various input protective circuits (free-wheel diode, varistor, RC filter)
- Pluggable cross-connections
- Enclosed design

### General ordering data

Order No.	<a href="#">8950900000</a>
Type	TOS 5VDC/48VDC 0,5A
Version	TERMOPTO, Solid-state relay, Rated control voltage: 5 V DC $\pm 20\%$ , Rated switching voltage: 5...48 V DC, Rated switching current: 500 mA, Screw connection
GTIN (EAN)	4032248742271
Qty.	10 pc(s).

**TERMOPTO**  
**TOS 5VDC/48VDC 0,5A**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com

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

Width	6.1 mm	Height	74.5 mm
Depth	55 mm	Net weight	20.1 g

**Temperatures**

Operating temperature	-20 °C...+60 °C	Storage temperature	-40 °C...+80 °C
-----------------------	-----------------	---------------------	-----------------

**Probability of failure**

MTTF	2,500 Years
------	-------------

**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>	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.6 Nm	Stripping length, rated connection	9 mm

**Control side**

Rated control voltage	5 V DC ±20 %	Nominal control current	7.7 mA DC
Power rating	< 40 mW	Input frequency	< 200 Hz
Cut-in (switch-on) voltage	≥ 4 V DC	Dropout voltage	≤ 2 V DC
Protective circuit, control side	Varistor, rev. polarity protection	Status display on control side	Green LED

**Load side**

Rated switching voltage	5...48 V DC	Continuous current	500 mA
Rated switching current	500 mA	Switch-on delay	< 20 µs
Switch-off delay	< 200 µs	Load category	DC1
Leakage current	< 10 µA	Protective circuit, load side	Integrated free-wheel diode
Voltage drop at max. load	< 1 V	Load side status indicator	No
Short-circuit-proof	No		

**General data**

Solid-state type	Transistor	No. of poles	1
Conductor connection system	Screw connection	Humidity	5...95 % rel. humidity T <sub>u</sub> = 40 °C, no condensation
UL 94 flammability rating	V-0	Standards	DIN EN 50178, IEC 62314, UL508

**Insulation coordination**

Rated voltage	300 V	Clearance and creepage distances for control side - load side	> 3 mm
Impulse withstand voltage	4 kV (1.2/50 µs)	Pollution severity	2
Surge voltage category	III		

**Further details of approvals**

Standards	DIN EN 50178, IEC 62314, UL508
-----------	--------------------------------

**Data sheet...****TERMOPTO**  
**TOS 5VDC/48VDC 0,5A****Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com**Technical data****Classifications**

ETIM 3.0	EC001504	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	<a href="#">K305_02_11.pdf</a>
EPLAN	<a href="#">8950900000.ema</a>
<a href="#">3-D model</a>	

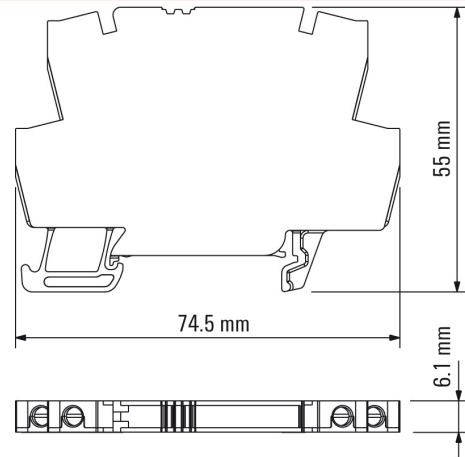
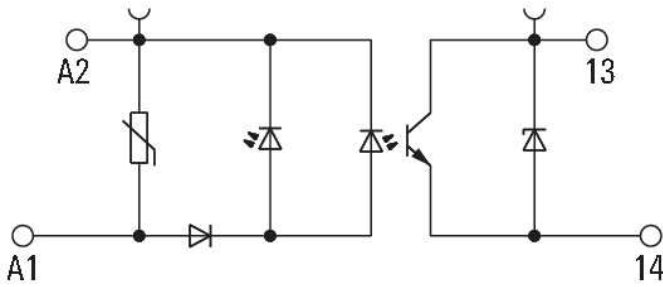
**TERMOPTO  
TOS 5VDC/48VDC 0,5A**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com

**Drawings**

**Electric symbol**

**5 V DC**



**TERMOPTO  
TOS 5VDC/48VDC 0,5A**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com

**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="#">1793960000</a>	ZQV 4N/2 BL	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 2	4032248233755	60 pc(s).
<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="#">1794060000</a>	ZQV 4N/10 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 10	4032248234059	20 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="#">1762630000</a>	ZQV 4N/3 GE	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 3	4032248169788	60 pc(s).
<a href="#">1794000000</a>	ZQV 4N/3 SW	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 3	4032248233793	60 pc(s).

## TERMOPTO TOS 5VDC/48VDC 0,5A

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

## Accessories

<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="#">1794010000</a> ZQV 4N/4 RT	Z-series, Accessories, Cross-connector, For the terminals, No. of poles: 4	4032248233809 60 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).

## 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:	4032248056286	1 pc(s).

**TERMOPTO  
TOS 5VDC/48VDC 0,5A**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
[www.weidmueller.com](http://www.weidmueller.com)

**Accessories**

100 mm, Blade thickness  
(A): 0.6 mm

---