

MOS 24VDC/5-33VDC 10A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Similar to illustration

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

Temperatures

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

Probability of failure

MTTF	399 Years
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Environmental Product Compliance

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

Rated control voltage	24 V DC $\pm 20\%$	Power rating	400 mW
Pull-in/drop-out voltage, typ.	18 V / 13 V DC	Status indicator	Green LED
Protective circuit	Varistor, Reverse polarity protection		

Load side

Rated switching voltage	5...33 V DC	Continuous current	10 A
Rated switching current	10 A	Load category	LC A
Pulse load, max. current	$\leq 11\text{ A}$ ($\leq 200\text{ }\mu\text{s}$)	Switch-on delay	typ. 250 μs
Switch-off delay	typical. 700 μs	Voltage drop at max. load	approx. 100 mV
Leakage current	< 1 mA	Min. switching current	10 mA
Short-circuit-proof	Yes (limited for 4 h / current limitation external < 200 A)	Load side status indicator	LED red, short-circuit / overload at the output
Protective circuit, load side	Current sensor, Varistor, Free-wheeling diode	Contact type	1 NO contact (POWER MOS-FET)
max. switching frequency (DC control voltage)	50 Hz		

General data

Rail	TS 35		
Colour	black		
UL 94 flammability rating	V-0		
UL94 flammability rating component	Component	Housing	
	UL94 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. (DNVGL)	TAE000033E
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 6.0	EC001504	ETIM 7.0	EC001504
ETIM 8.0	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

Important note

Product information	The cable lengths must not exceed 30 m.
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Approvals

Approvals



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

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Downloads

Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Beipackzettel / Package Insert – multilingual
Catalogues	Catalogues in PDF-format
Brochures	

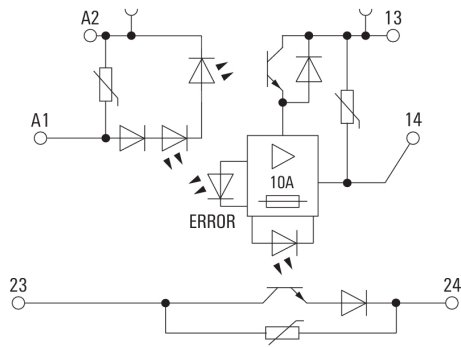
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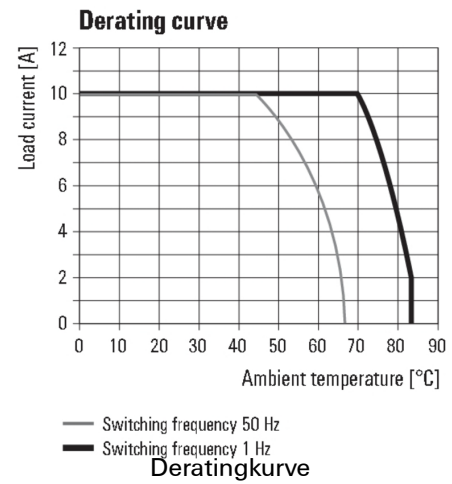
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Drawings

Wiring diagram



Graph



Dimensional drawing

