

## TOS 120VUC 24VDC2A

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

### Product image



Similar to illustration

- 1 NO contact (MOS-FET)
- 6.4 mm wide
- 2 A DC output current
- Unique multi-voltage input from 24 to 230 V UC
- Input voltages from 12 V DC to 230 V UC with coloured marking: AC: red, DC: blue, UC: white

### General ordering data

Version	TERMSERIES, Solid-state relay, Rated control voltage: 120 V UC $\pm 10\%$ , Rated switching voltage: 3...33 V DC, Continuous current: 2 A, Screw connection
Order No.	<a href="#">1127210000</a>
Type	TOS 120VUC 24VDC2A
GTIN (EAN)	4032248909315
Qty.	10 items

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## Technical data

## Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E141197

## Dimensions and weights

Depth	87.8 mm	Depth (inches)	3.4567 inch
Height	89.6 mm	Height (inches)	3.5276 inch
Width	6.4 mm	Width (inches)	0.252 inch
Net weight	32.4 g		

## Temperatures

Storage temperature	-40 °C...70 °C	Ambient temperature	-20 °C...60 °C
Operating temperature		Humidity	5-95% relative humidity, Tu = 40°C, without condensation

## Probability of failure

MTTF 676 a

## Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	9e2cbc49-76d9-4611-b8ec-5b4f549a0aa9

## Rated data UL

Ambient temperature (operational), max.	60 °C	Connection cross-section AWG, min.	AWG 26
Connection cross-section AWG, max.	AWG 14	Type of conductor	rigid copper conductor, flexible copper conductor
Tightening torque, max.	0.4 Nm	Pollution severity level	2

## Control side

Rated control voltage	120 V UC ± 10 %	Nominal control current	4.1 mA AC (± 10 %), 2.6 mA DC (± 10%)
Power rating	0.49 VA, 0.31 W	Status indicator	Green LED
Protective circuit	Rectifier	Input frequency	3 Hz
Coil voltage of the replacement relay deviating from the rated control voltage	Yes	Coil voltage of the replacement relay	60 V DC

## Load side

Rated switching voltage	3...33 V DC	Continuous current	2 A
Rated switching current	2 A	Inrush current	15 A / 10 ms
Switch-on delay	<6.5 ms	Switch-off delay	≤ 16 ms
Voltage drop at max. load	≤ 120 mV	Leakage current	<10 µA

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Min. switching current	5 mA	Short-circuit-proof	No
Protective circuit, load side	Free-wheeling diode	Contact type	1 NO contact (MOS-FET)
max. switching frequency (AC control voltage)	10 Hz	max. switching frequency (DC control voltage)	10 Hz

## General data

Mounting rail	TS 35		
Test button available	No		
Colour	black		
UL94 flammability rating component	Component	Housing	
	UL94 flammability rating	V-0	
	Component	Retaining clip	
	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	≥ 5.5 mm
Dielectric strength for control side - load side	2.5 kVeff	Dielectric strength to mounting rail	4 kVeff / 1 Min.
Impulse withstand voltage	6 kV (1.2/50 µs)	Protection degree	IP20

## Further details of approvals / standards

Certificate No. (DNV)	TAA00001E5	Certificate no. (cULus)	E141197
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## Connection data

Wire connection method	Screw connection	Stripping length, rated connection	8 mm
Tightening torque, max.	0.4 Nm	Clamping range, rated connection	1.5 mm <sup>2</sup>
Clamping range, min.	0.14 mm <sup>2</sup>	Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 26	Wire connection cross section AWG, max.	AWG 14
Wire cross-section, solid, min.	0.14 mm <sup>2</sup>	Wire cross-section, solid, max.	2.5 mm <sup>2</sup>
Wire cross-section, solid, min. (AWG)	AWG 26	Wire cross-section, solid, max. (AWG)	AWG 14
Wire connection cross section, finely stranded, min.	0.14 mm <sup>2</sup>	Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>
Wire cross-section, finely stranded, min. (AWG)	AWG 26	Wire cross-section, finely stranded, max. (AWG)	AWG 14
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.25 mm <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.25 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), max.	2.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, two clampable wires, min.	0.5 mm <sup>2</sup>	Wire cross-section, finely stranded, two clampable wires, max.	1 mm <sup>2</sup>
Blade size	size PH0		

## Classifications

ETIM 8.0	EC001504	ETIM 9.0	EC001504
ETIM 10.0	EC001504	ECLASS 14.0	27-37-16-04
ECLASS 15.0	27-37-16-04		

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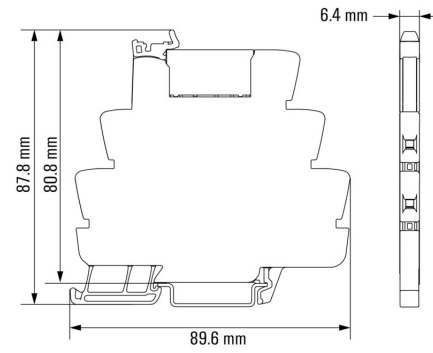
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Drawings

Wiring diagram



Dimensional drawing



Miscellaneous

## Type code TERMSERIES solid-state relay versions



Type codes

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## Accessories

## Partition plate



## Versatile separation plates

Separation plates can be used to group together signals visually, to electrically isolate modules and to insert markings for a better overview. This makes them a particularly versatile accessory. Separation plates increase the clearance and creepage distances between two modules, thus increasing the rated insulation voltage between two modules to up to 600 V. Double separation plates can be marked with WAD5 or WS10/5 markers and enable continuous cross-connections. Installation is made easier with the perforations to individually break out the cross-connection channels.

- Partition plates visually separates groups from each other
- Indentations for individual breaking out the crossconnection channels
- Partition plates isolates between two modules by increasing the clearance and creepage distances of up to 600 V

## General ordering data

Type	TW TXS/TXZ R3.2	Version	
Order No.	<a href="#">1240800000</a>	TERMSERIES, Partition plate	
GTIN (EAN)	4050118028188		
Qty.	10 ST		

## Supply module



## Space-saving supply modules

Our supply terminals enable potentials to be fed at the input – e.g. neutral or minus potentials – or switched potentials to be fed at the output. In conjunction with precisely fitting cross-connections from the TERMSERIES, the connections for the cables on the relay module remain free for actuators or sensors. No additional feed-through terminal blocks are required, resulting in huge space savings in the panel. At the same time, the wiring is simplified as no double wire-end ferrules are required for the potential feed.

## General ordering data

Type	TXP SUPPLY	Version	
Order No.	<a href="#">2618940000</a>	TERMSERIES, Supply module, Number of contacts: 5, Continuous	
GTIN (EAN)	4050118667592	current: 10 A, PUSH IN	
Qty.	10 ST		

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Accessories

Type	TXS SUPPLY	Version
Order No.	<a href="#">1240780000</a>	TERMSERIES, Supply module, Number of contacts: 5, , Continuous
GTIN (EAN)	4050118028140	current: 10 A, Screw connection
Qty.	10 ST	
Type	TXZ SUPPLY	Version
Order No.	<a href="#">1240790000</a>	TERMSERIES, Supply module, Number of contacts: 5, , Continuous
GTIN (EAN)	4050118028164	current: 10 A, Tension-clamp connection
Qty.	10 ST	

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 10/6 M MC NE WS	Version
Order No.	<a href="#">1818400000</a>	WS, Terminal marker, 10 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4032248310876	Allen-Bradley, white
Qty.	600 ST	

ZQV

General ordering data

Type	ZQV 1.5N/R6.4/2 GE	Version
Order No.	<a href="#">1193670000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4032248976638	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/10 GE	Version
Order No.	<a href="#">1193680000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4032248976454	
Qty.	10 ST	

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Type	ZQV 1.5N/R6.4/19 GE	Version
Order No.	<a href="#">1193690000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4032248976645	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/2 BL	Version
Order No.	<a href="#">1446140000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118251074	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/10 BL	Version
Order No.	<a href="#">1390350000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118190793	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/19 BL	Version
Order No.	<a href="#">1391620000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118191813	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/2 RT	Version
Order No.	<a href="#">1446090000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118250886	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/10 RT	Version
Order No.	<a href="#">1391640000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118191660	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/19 RT	Version
Order No.	<a href="#">1391610000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118191783	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/2 SW	Version
Order No.	<a href="#">1446040000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118251067	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/10 SW	Version
Order No.	<a href="#">1391630000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118191776	
Qty.	10 ST	
Type	ZQV 1.5N/R6.4/19 SW	Version
Order No.	<a href="#">1391600000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118191806	
Qty.	10 ST	

### Crosshead screwdriver Phillips



Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip

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## Accessories

## General ordering data

Type	SDK PH0 X 60	Version
Order No.	<a href="#">2749400000</a>	Screwdriver, Blade width (B): 3 mm, 60 mm, Blade thickness (A): 0
GTIN (EAN)	4050118895629	
Qty.	1 ST	
Type	SDIK PH0 X 60	Version
Order No.	<a href="#">2749880000</a>	Screwdriver, Blade width (B): 0 mm, 60 mm, Blade thickness (A): 0
GTIN (EAN)	4050118897081	
Qty.	1 ST	

## 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.	1 ST	
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 ST	

## Cross-connections



## Adjustable cross-connections

Increase the flexibility of your cross-connections. The TERMSERIES CROSS-CONNECTION (TCC) enables individually adjustable cross-connections with up to 51 poles. The maximum number of pluggable poles has been increased to 32 poles. The strip material can be shortened to the required length very easily. The cross-connectors convince thanks to their easy handling and visibility as well as their universal connection possibilities. An additional web prevents the spring from deforming during assembly.

- Individually adjustable cross-connection with 51 poles
- Additional bar to avoid deformation of the spring
- Increased cross-connection – up to 32 poles possible
- Vibration resistance

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## General ordering data

Type	TCC 6.4/51 RD	Version
Order No.	<a href="#">2556410000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566925	
Qty.	10 ST	
Type	TCC 6.4/51 OR	Version
Order No.	<a href="#">2556370000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566680	
Qty.	10 ST	
Type	TCC 6.4/51 BL	Version
Order No.	<a href="#">2556450000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566963	
Qty.	10 ST	
Type	TCC 6.4/51 BK	Version
Order No.	<a href="#">2556490000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118567007	
Qty.	10 ST	
Type	TCC 6.4/2 OR	Version
Order No.	<a href="#">2556350000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566826	
Qty.	10 ST	
Type	TCC 6.4/2 BL	Version
Order No.	<a href="#">2556430000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566949	
Qty.	10 ST	
Type	TCC 6.4/2 BK	Version
Order No.	<a href="#">2556470000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566987	
Qty.	10 ST	
Type	TCC 6.4/10 RD	Version
Order No.	<a href="#">2556400000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566918	
Qty.	10 ST	
Type	TCC 6.4/10 OR	Version
Order No.	<a href="#">2556360000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566673	
Qty.	10 ST	
Type	TCC 6.4/10 BL	Version
Order No.	<a href="#">2556440000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566956	
Qty.	10 ST	
Type	TCC 6.4/10 BK	Version
Order No.	<a href="#">2556480000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566994	
Qty.	10 ST	
Type	TCC 12.8/26 RD	Version
Order No.	<a href="#">2556420000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566932	
Qty.	10 ST	
Type	TCC 12.8/26 OR	Version
Order No.	<a href="#">2556380000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566697	
Qty.	10 ST	

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Type	TCC 12.8/26 BL	Version
Order No.	<a href="#">2556460000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566970	
Qty.	10 ST	
Type	TCC 12.8/26 BK	Version
Order No.	<a href="#">2556500000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118567014	
Qty.	10 ST	
Type	TCC 6.4/2 RD	Version
Order No.	<a href="#">2556390000</a>	TERMSERIES, Cross-connector
GTIN (EAN)	4050118566901	
Qty.	10 ST	