

## TRPL 48-110VDC 1CO TRAK

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)



The ultra-compact TERMSERIES-compact TRAK complete modules comply with the strict standards of the railway industry. Their relays are permanently installed, which makes them particularly vibration-proof. They operate reliably in a temperature range of -40 to +70 °C and are protected against condensation. Typical railway voltage fluctuations and interruptions are tolerated without functional failure. Thanks to their slim, flat design, they can be installed anywhere. And since their contours are identical to those of the tried-and-tested TERMSERIES, all accessories of the series can be used. This means that extremely robust solutions can be realised - even outside the railway industry.

- Developed according to the strict railway standards EN 50155, EN 61373 and EN 45545-2
- Resistant to voltage and temperature fluctuations
- Insensitive to shocks and vibrations
- Extremely compact with a width of only 6.4 mm and a depth of 63 mm
- Integrated status LED for easy function testing
- Compatible with the complete range of TERMSERIES accessories
- Version 1 changeover contact

### General ordering data

Version	TERMSERIES-compact, Relay module, Number of contacts: 1, CO contact AgSnO <sub>2</sub> , Rated control voltage: 48 V...110 V DC +25 % / -30 %, Continuous current: 6 A, PUSH IN, Test button available: No
Order No.	<a href="#">2774010000</a>
Type	TRPL 48-110VDC 1CO TRAK
GTIN (EAN)	4064675037781
Qty.	10 items

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**Technical data**

**Approvals**

Approvals



**Dimensions and weights**

Depth	62.5 mm	Depth (inches)	2.4606 inch
Height	89.4 mm	Height (inches)	3.5197 inch
Width	6.4 mm	Width (inches)	0.252 inch
Net weight	25 g		

**Temperatures**

Storage temperature	-40 °C...85 °C	Ambient temperature	-40 °C...70 °C
Operating temperature		Humidity	95 % for 30 days, minimal condensation to EN 50155

**Environmental Product Compliance**

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1
SCIP	75e5f661-708e-44b0-9fc2-4f6c675b3b71

**Control side**

Rated control voltage	48 V...110 V DC +25 % / -30 %	Rated current DC	2.4 mA @ 48 V DC, 3.2 mA @ 110 V DC
Power rating	115 mW @ 48 V DC, 352 mW @ 110 V DC	Coil resistance	10600 Ω ± 15 %
Status indicator	Green LED	Protective circuit	Suppressor diode, Free-wheeling diode

**Load side**

Rated switching voltage	250 V AC	Continuous current	6 A
Max. switching frequency at rated load	0.1 Hz	Max. switching voltage, AC	250 V
Max. switching voltage, DC	250 V	Inrush current	20 A / 20 ms
AC switching capacity (resistive), max.	1500 VA	Switch-on delay	<11 ms
Switch-off delay	<30 ms	Contact type	1 CO contact (AgSnO2)
Mechanical service life	10 x 10 <sup>6</sup> switching cycles	Min. switching power	1 mA @ 24 V, 10 mA @ 12 V, 100 mA @ 5 V

**General data**

Operating altitude	≤ 2000 m, above sea level		
Version	for railway applications		
Mounting rail	TS 35		
Test button available	No		
Mechanical switch position indicator	No		
Colour	black		
UL94 flammability rating component	Component	Housing	
	UL94 flammability rating	V-0	
	Component	Relay status indicator	

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## Technical data

UL94 flammability rating	V-0
Component	Pusher
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	≥ 6 mm
Dielectric strength for control side - load side	4 kVeff / 1 Min.	Type of isolation at input and output	reinforced insulation
Dielectric strength of open contact	1 kVeff / 1 min	Dielectric strength to mounting rail	4 kVeff / 1 Min.
Impulse withstand voltage	6 kV (1.2/50 µs)	Protection degree	IP20

### Connection data

Wire connection method	PUSH IN	Stripping length, rated connection	9 mm
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.	0.5 mm <sup>2</sup>
Wire cross-section, solid, max.	1.5 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.	0.35 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.	0.14 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm <sup>2</sup>	Blade size	0.6 x 3.5 mm

### Classifications

ETIM 8.0	EC001437	ETIM 9.0	EC001437
ETIM 10.0	EC001437	ECLASS 14.0	27-37-16-01
ECLASS 15.0	27-37-16-01		

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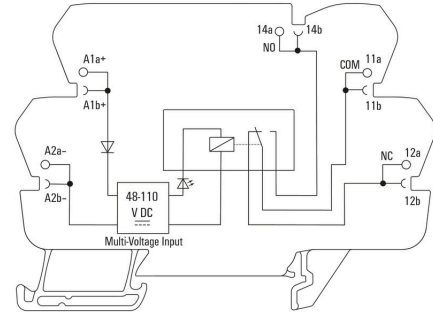
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Drawings

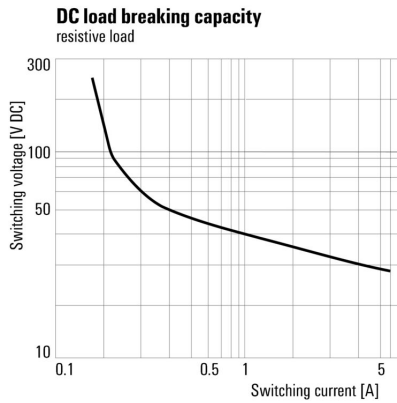
Similar to illustration



Wiring diagram

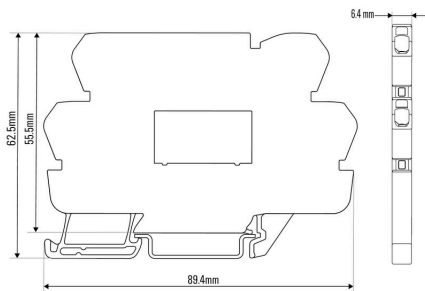


Graph



DC load limit curve Resistive load

Dimensional drawing



Miscellaneous

**Type code electromechanical relay**



Type codes

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## Accessories

## 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	

## 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

## 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	

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### Accessories

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	
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	

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## Accessories

### Slotted screwdriver

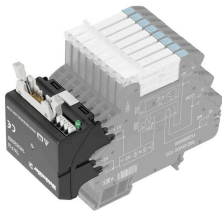


VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

### General ordering data

Type	SDIS 0.6X3.5X100	Version	
Order No.	<a href="#">2749810000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm	
GTIN (EAN)	4050118897012		
Qty.	1 ST		
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		

### Interface adapters



#### Faster signal wiring with less space

To reduce wiring times, pre-assembled cables are used between the control system and the interface level and are simply connected to the TERM SERIES adapter. This enables throughput times in electrical cabinet building to be significantly reduced. The adapter has a universal fit and offers a genuine space advantage in interaction with the TERM SERIES products with identical contours.

- Reduced wiring time due to plug-and-play concept with pre-assembled cables
- Can be applied to the input and output sides of the TERM SERIES
- Ready for plus and minus switching logic
- High space-saving due to universal fit to other TERM SERIES products

### General ordering data

Type	TIA F10	Version	
Order No.	<a href="#">1463520000</a>	TERMSERIES, Adapter, 10-pole plug according to DIN EN 60603-13, long locking lever, Number of signal paths: 8, Rated voltage DC : 24 V, Rated current (per signal path): 125 mA	
GTIN (EAN)	4050118323535		
Qty.	1 ST		
Type	TIA SUBD 15S	Version	
Order No.	<a href="#">1463530000</a>	TERMSERIES, Adapter, Sub-D, 15-pole, DIN 41652 / IEC 60807, Number of signal paths: 8, Rated voltage DC : 24 V, Rated current (per signal path): 125 mA	
GTIN (EAN)	4050118323542		
Qty.	1 ST		
Type	TIAL F10	Version	
Order No.	<a href="#">1463540000</a>	TERMSERIES, Adapter, 10-pole plug according to DIN EN 60603-13, long locking lever, Number of signal paths: 8, Rated voltage DC : 24 V, Rated current (per signal path): 125 mA	
GTIN (EAN)	4050118323559		
Qty.	1 ST		

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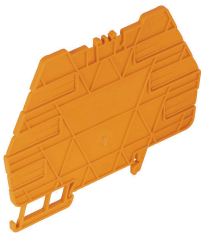
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## Accessories

Type	TIAL F20	Version
Order No.	<a href="#">1463550000</a>	TERMSERIES, Adapter, 20-pole plug according to DIN EN 60603-13,
GTIN (EAN)	4050118331783	long locking lever, Number of signal paths: 16, Rated voltage DC : 24
Qty.	1 ST	V, Rated current (per signal path): 60 mA

## 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	
Type	TXL PP	Version
Order No.	<a href="#">2774090000</a>	TERMSERIES-compact, Partition plate
GTIN (EAN)	4064675037866	
Qty.	10 ST	

## Feed through module



## Precision-fit feed-through terminals

The precisely fitting terminals enable potentials to be brought from the control side to the load side and vice versa. Due to the compatibility with the TERMSERIES, there is a uniform test system with a standardised test tap.

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## Accessories

### General ordering data

Type	TXPL FT	Version	
Order No.	<a href="#">2774080000</a>	TERMSERIES-compact, Feed-through terminal, PUSH IN	
GTIN (EAN)	4064675037859		
Qty.	1 ST		

### Supply module



**Space-saving feed-in terminals**  
 For easy feed-in of neutral or negative potentials at the input of switched potentials at the output. Cross-connections enable space-saving connection of sensors and actuators without additional feed-through terminal blocks.

### General ordering data

Type	TXPL S	Version	
Order No.	<a href="#">2774100000</a>	TERMSERIES-compact, Supply module, PUSH IN	
GTIN (EAN)	4064675037873		
Qty.	1 ST		