

TRP 24VUC 1CO 16A PB

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

www.weidmueller.com

Product image



- 1 CO contact
- Contact material: AgNi
- Unique multi-voltage input from 24 to 230 V UC
- Input voltages from 24 V DC and 230 V UC with coloured marking: DC: blue, UC: white
- Version with lockable test button for manual switching

General ordering data

| | |
|------------|---|
| Version | TERMSERIES, Relay module, Number of contacts: 1, CO contact AgNi, Rated control voltage: 24 V UC $\pm 10\%$, Continuous current: 16 A, PUSH IN, Test button available: Yes |
| Order No. | 2988300000 |
| Type | TRP 24VUC 1CO 16A PB |
| GTIN (EAN) | 4099986859104 |
| Qty. | 5 items |

TRP 24VUC 1CO 16A PB

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

www.weidmueller.com

Technical data

Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate no. (cULus) E141197

Dimensions and weights

| | | | |
|------------|---------|-----------------|-------------|
| Depth | 97.5 mm | Depth (inches) | 3.8386 inch |
| Height | 89.4 mm | Height (inches) | 3.5197 inch |
| Width | 12.8 mm | Width (inches) | 0.5039 inch |
| Net weight | 62 g | | |

Temperatures

| | | | |
|-----------------------|----------------|---------------------|---|
| Storage temperature | -40 °C...70 °C | Ambient temperature | -40 °C...60 °C |
| Operating temperature | | Humidity | 5...85 % rel. humidity, no condensation |

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 | | Output current derating (ohmic) | 16 A @ 55 °C, 12 A @ 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 | Pollution severity level | 2 |

Control side

| | | | |
|---------------------------------------|---|--|-----------|
| Rated control voltage | 24 V UC ±10 % | Rated current DC | 16.7 mA |
| Power rating | 430 mVA @ 24 V AC | Status indicator | Green LED |
| Protective circuit | Free-wheeling diode, Reverse polarity protection | Coil voltage of the replacement relay deviating from the rated control voltage | No |
| Coil voltage of the replacement relay | 24 V DC | | |

Load side

| | | | |
|---|--------------------------------------|---|----------------------------|
| Rated switching voltage | 250 V AC | Continuous current | 16 A |
| Max. switching frequency at rated load | 0.1 Hz | Max. switching voltage, AC | 250 V |
| Max. switching voltage, DC | 250 V | Inrush current | 30 A / 4 s |
| AC switching capacity (resistive), max. | 4000 VA | DC switching capacity (resistive), max. | 384W @ 24V |
| Switch-on delay | ≤ 15 ms | Switch-off delay | ≤ 16 ms |
| Protective circuit, load side | Rectifier | Contact type | 1 CO contact (AgNi) |
| Mechanical service life | 5 x 10 ⁶ switching cycles | Min. switching power | 10 mA @ 10 V, 100 mA @ 5 V |

TRP 24VUC 1CO 16A PB

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Technical data

General data

| | | | |
|--------------------------------------|---|----------------|--|
| Operating altitude | ≤ 2000 m, above sea level | | |
| Mounting rail | TS 35 | | |
| Test button available | Yes | | |
| Version of test button | Lockable test button, Momentary test button | | |
| Mechanical switch position indicator | Yes | | |
| Colour | black | | |
| UL94 flammability rating component | Component | Housing | |
| | UL94 flammability rating | V-0 | |
| | Component | Retaining clip | |
| | 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 | ≥ 5.5 mm |
| Dielectric strength for control side - load side | 1.2 kVeff / 1 min. | Type of isolation at input and output | reinforced insulation |
| Dielectric strength of open contact | 2.5 kVeff / 1 min | Dielectric strength to mounting rail | 4 kVeff / 1 Min. |
| Impulse withstand voltage | 6 kV (1.2/50 µs) | Protection degree | IP20 |
| Impulse withstand voltage at neighbouring contacts | 4 kV (1.2/50 µs) | | |

Further details of approvals / standards

| | |
|-------------------------|---------|
| Certificate no. (cULus) | E141197 |
|-------------------------|---------|

Connection data

| | | | |
|---|---------------------|---|----------------------|
| Wire connection method | PUSH IN | Stripping length, rated connection | 9 mm |
| Clamping range, rated connection | 1.5 mm ² | Clamping range, min. | 0.14 mm ² |
| Clamping range, max. | 2.5 mm ² | Wire connection cross section AWG, min. | AWG 26 |
| Wire connection cross section AWG, max. | AWG 14 | Wire cross-section, solid, min. | 0.14 mm ² |
| Wire cross-section, solid, max. | 1.5 mm ² | Wire cross-section, solid, min. (AWG) | AWG 26 |
| Wire cross-section, solid, max. (AWG) | AWG 16 | Wire connection cross section, finely stranded, min. | 0.14 mm ² |
| Wire connection cross section, finely stranded, max. | 2.5 mm ² | 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 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. | 0.14 mm ² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 1.5 mm ² | Blade size | 0.4 x 2.0 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 | | |

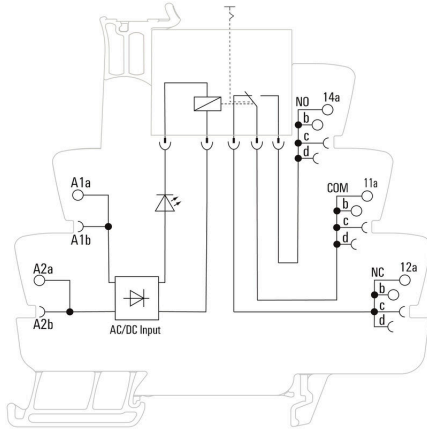
TRP 24VUC 1CO 16A PB

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

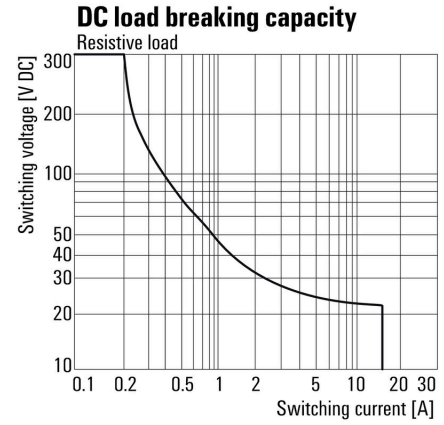
www.weidmueller.com

Drawings

Wiring diagram



Graph



DC load limit curve Resistive load

Dimensional drawing



Miscellaneous

Type code TERMSERIES electromechanical relay versions



Sonstiges

TRP 24VUC 1CO 16A PB

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

www.weidmueller.com

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. | 1240800000 | 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. | 2618940000 | TERMSERIES, Supply module, Number of contacts: 5, , Continuous | |
| GTIN (EAN) | 4050118667592 | current: 10 A, PUSH IN | |
| Qty. | 10 ST | | |

TRP 24VUC 1CO 16A PB

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

| | | |
|------------|----------------------------|--|
| Type | TXS SUPPLY | Version |
| Order No. | 1240780000 | 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. | 1240790000 | 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. | 1818400000 | 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. | 2556410000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566925 | |
| Qty. | 10 ST | |

TRP 24VUC 1C0 16A PB

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

www.weidmueller.com

Accessories

| | | |
|------------|----------------------------|-----------------------------|
| Type | TCC 6.4/51 OR | Version |
| Order No. | 2556370000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566680 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/51 BL | Version |
| Order No. | 2556450000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566963 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/51 BK | Version |
| Order No. | 2556490000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118567007 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/2 OR | Version |
| Order No. | 2556350000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566826 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/2 BL | Version |
| Order No. | 2556430000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566949 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/2 BK | Version |
| Order No. | 2556470000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566987 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/10 RD | Version |
| Order No. | 2556400000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566918 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/10 OR | Version |
| Order No. | 2556360000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566673 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/10 BL | Version |
| Order No. | 2556440000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566956 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/10 BK | Version |
| Order No. | 2556480000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566994 | |
| Qty. | 10 ST | |
| Type | TCC 12.8/26 RD | Version |
| Order No. | 2556420000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566932 | |
| Qty. | 10 ST | |
| Type | TCC 12.8/26 OR | Version |
| Order No. | 2556380000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566697 | |
| Qty. | 10 ST | |
| Type | TCC 12.8/26 BL | Version |
| Order No. | 2556460000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566970 | |
| Qty. | 10 ST | |

TRP 24VUC 1CO 16A PB

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

www.weidmueller.com

Accessories

| | | |
|------------|----------------------------|-----------------------------|
| Type | TCC 12.8/26 BK | Version |
| Order No. | 2556500000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118567014 | |
| Qty. | 10 ST | |
| Type | TCC 6.4/2 RD | Version |
| Order No. | 2556390000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566901 | |
| Qty. | 10 ST | |

Slotted screwdriver

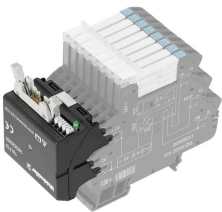


Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SDS 0.4X2.5X75 | Version |
| Order No. | 2749320000 | Screwdriver, Blade width (B): 2.5 mm, Blade length: 75 mm, Blade thickness (A): 0.4 mm |
| GTIN (EAN) | 4050118895544 | |
| Qty. | 1 ST | |
| Type | SDIS 0.4X2.5X75 | Version |
| Order No. | 2749790000 | Screwdriver, Blade width (B): 2.5 mm, Blade length: 75 mm, Blade thickness (A): 0.4 mm |
| GTIN (EAN) | 4050118896534 | |
| 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 TERMSERIES 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 TERMSERIES 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 TERMSERIES
- Ready for plus and minus switching logic
- High space-saving due to universal fit to other TERMSERIES products

General ordering data

| | | |
|------------|----------------------------|---|
| Type | TIAL F10 | Version |
| Order No. | 1463540000 | TERMSERIES, Adapter, 10-pole plug according to DIN EN 60603-13, |
| GTIN (EAN) | 4050118323559 | long locking lever, Number of signal paths: 8, Rated voltage DC : 24 V, |
| Qty. | 1 ST | Rated current (per signal path): 125 mA |

TRP 24VUC 1CO 16A PB

Weidmüller Interface GmbH & Co. KG

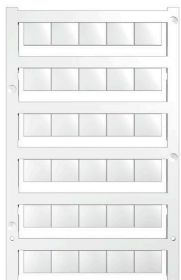
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Accessories

| | | | |
|------------|----------------------------|---|--|
| Type | TIAL F20 | Version | |
| Order No. | 1463550000 | 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 | |

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 10/12 MC NE WS | Version | |
| Order No. | 1905970000 | WS, Terminal marker, 10 x 12 mm, Pitch in mm (P): 12.00 | |
| GTIN (EAN) | 4032248528127 | Weidmueller, white | |
| Qty. | 300 ST | | |

WS 12/6



WS/ DEK

MultiMark terminal markers use an innovative composite material made from two components. The hard base contour of the marker snaps securely into the connector. The elastic surface finish makes the marker easy to mount. This specially punched material enables the strips to be stretched to accommodate the slight variations in spacing that tend to add up, especially with long terminal blocks. Another advantage: the excellent printability of the surface material guarantees durable and wear-resistant labelling. A print resolution of 300 dpi also produces a very legible script.

Your benefits with MultiMark

- Firm hold and durable printing
- Continuous strips save installation time
- Easy mounting thanks to an innovative composite material
- Large label field for optimal legibility
- High flexibility thanks to manufacturer independence

General ordering data

| | | | |
|------------|----------------------------|--|--|
| Type | WS 12/6 MM WS | Version | |
| Order No. | 2007200000 | WS, Terminal marker, 12 x 6 mm, Weidmueller, white | |
| GTIN (EAN) | 4050118391886 | | |
| Qty. | 600 ST | | |