

TRP 24VDC ACT PB**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Similar to illustration

General ordering data

| | |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version | TERMSERIES, Relay module, Number of contacts: 1, NO contact AgSnO, Rated control voltage: 24 V DC $\pm 20\%$, Continuous current: 6 A, PUSH IN, Test button available: Yes |
| Order No. | 2855840000 |
| Type | TRP 24VDC ACT PB |
| GTIN (EAN) | 4064675534143 |
| Qty. | 10 pc(s). |

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www.weidmueller.com

Technical data

Dimensions and weights

| | | | |
|------------|---------|-----------------|------------|
| Depth | 87 mm | Depth (inches) | 3.425 inch |
| Height | 89.4 mm | Height (inches) | 3.52 inch |
| Width | 6.4 mm | Width (inches) | 0.252 inch |
| Net weight | 28.44 g | | |

Temperatures

| | | | |
|---------------------|----------------------------------------------------------------------|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -40 °C...60 °C |
| Humidity | 5-95% relative humidity, T _u = 40°C, without condensation | | |

Rated data UL

| | | | |
|-----------------------------------------|---------------------------------------------------|------------------------------------|--------------------------|
| Ambient temperature (operational), max. | 60 °C | Output current derating (ohmic) | 6 A @ 50 °C, 5 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 DC \pm 20 % | Rated current DC | 11.5 mA |
| Power rating | 280 mW | 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 | 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 | 30 A / 20 ms |
| AC switching capacity (resistive), max. | 1500 VA | DC switching capacity (resistive), max. | 144 W @ 24 V |
| Switch-on delay | \leq 12 ms | Switch-off delay | \leq 12 ms |
| Contact type | 1 NO contact (AgSnO) | Mechanical service life | 10 x 10 ⁶ switching cycles |
| Min. switching power | 1 mA @ 24 V, 10 mA @ 12 V, 100 mA @ 5 V | | |

General data

| | | |
|------------------------------------|--------------------------------|----------------|
| Operating altitude | \leq 2000 m, above sea level | |
| Rail | TS 35 | |
| Test button available | Yes | |
| Version of test button | Lockable test button | |
| 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 |

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Technical data

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 | 3.51 kV _{eff} / 1 min. | Type of isolation at input and output | reinforced insulation |
| Dielectric strength of open contact | 1 kV _{eff} / 1 min | Dielectric strength to mounting rail | 4 kV _{eff} / 1 Min. |
| Impulse withstand voltage | 6 kV (1.2/50 µs) | Protection degree | IP20 |

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 | Twin wire-end ferrules, min. | 0.5 mm ² |
| Twin wire-end ferrules, max. | 1 mm ² | Blade size | 0.4 x 2.0 mm |

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC001437 | ETIM 7.0 | EC001437 |
| ETIM 8.0 | EC001437 | ETIM 9.0 | EC001437 |
| ECLASS 9.0 | 27-37-16-01 | ECLASS 9.1 | 27-37-16-01 |
| ECLASS 10.0 | 27-37-16-01 | ECLASS 11.0 | 27-37-16-01 |
| ECLASS 12.0 | 27-37-16-01 | ECLASS 13.0 | 27-37-16-01 |

Environmental Product Compliance

| | |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1 |
| SCIP | 9e2cbc49-76d9-4611-b8ec-5b4f549a0aa9 |

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www.weidmueller.com**Technical data****Approvals**

Approvals



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

Downloads

| | |
|---------------------------------------------|-------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | EU Konformitätserklärung / EU declaration of conformity |
| Engineering Data | CAD data – STEP |
| User Documentation | Beipackzettel / Package Insert – multilingual |
| Catalogues | Catalogues in PDF-format |

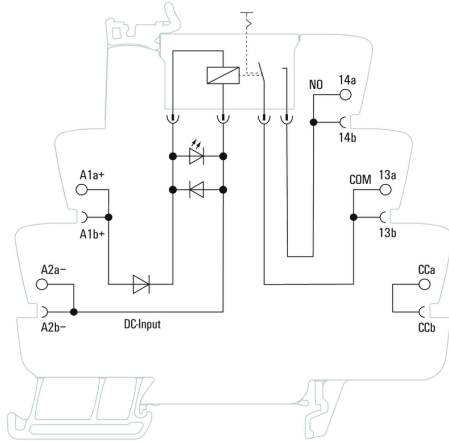
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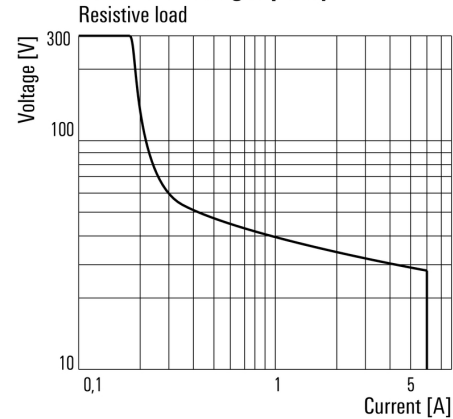
Drawings

Wiring diagram



Graph

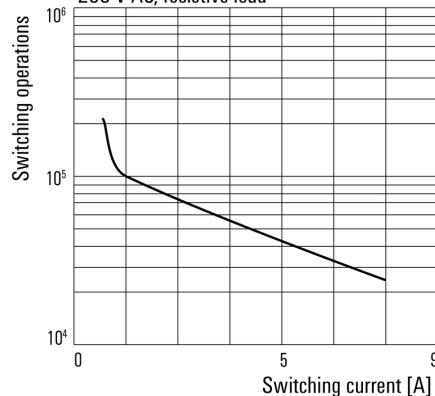
DC load breaking capacity



DC load limit curve

Graph

Electrical endurance
250 V AC, resistive load

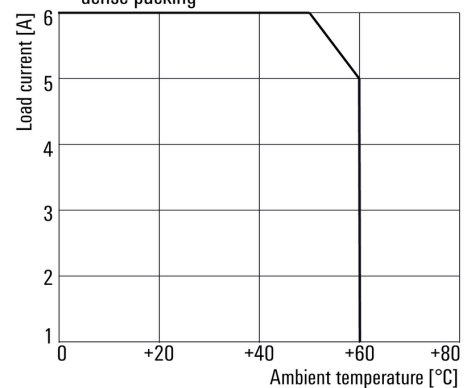


Electrical service life 230 V AC resistive load
230 V AC resistive load

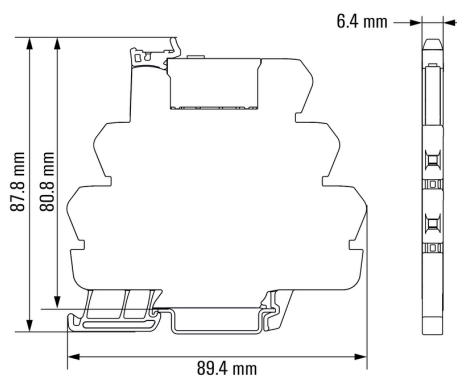
Derating curve

Derating curve

dense packing



Dimensional drawing



Miscellaneous

Function of test button

Mode is selected by rotating the orange switch.
The test button can be rotated endlessly.
The groove on the top shows the selected mode.

View from the top:



Auto Mode:

Relay contact is controlled by the coil.



Manual ON:

Relay is manually switch on without applied coil voltage.
- NO contact is closed

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www.weidmueller.com**Accessories****Crosshead screwdriver Phillips**

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

General ordering data

| | | |
|------------|----------------------------|-----------------------------------------------------------|
| Type | SDK PH0 X 60 | Version |
| Order No. | 2749400000 | Screwdriver, Blade width (B): 60 mm, Blade thickness (A): |
| GTIN (EAN) | 4050118895629 | |
| Qty. | 1 pc(s). | |

Slotted screwdriver

VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

General ordering data

| | | |
|------------|----------------------------|---------------------------------------------------------------------|
| Type | SDIS SLIM 0.6X3.5X100 | Version |
| Order No. | 2749610000 | Mounting tool, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade |
| GTIN (EAN) | 4050118896350 | thickness (A): 0.6 mm |
| Qty. | 1 pc(s). | |

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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 pc(s). | |

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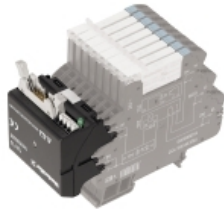
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Accessories

TERMSERIES interface adapter



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 | TIA SUBD 15S | Version |
| Order No. | 1463530000 | TERMSERIES, Adapter, Sub-D, 15-pole, DIN 41652 / IEC 60807, |
| GTIN (EAN) | 4050118323542 | Number of signal paths: 8, Rated voltage DC : 24 V, Rated current (per |
| Qty. | 1 pc(s). | signal path): 125 mA |
| Type | TIA F10 | Version |
| Order No. | 1463520000 | TERMSERIES, Adapter, 10-pole plug according to DIN EN 60603-13, |
| GTIN (EAN) | 4050118323535 | long locking lever, Number of signal paths: 8, Rated voltage DC : 24 V, |
| Qty. | 1 pc(s). | Rated current (per signal path): 125 mA |
| 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 pc(s). | V, Rated current (per signal path): 60 mA |

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Accessories

Cross-connections



Adjustable cross-connections

Increase the flexibility of your cross-connections. The TERM SERIES 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 6.4/10 RD | Version |
| Order No. | 2556400000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566918 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/10 OR | Version |
| Order No. | 2556360000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566673 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/51 RD | Version |
| Order No. | 2556410000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566925 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/51 BK | Version |
| Order No. | 2556490000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118567007 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/2 BL | Version |
| Order No. | 2556430000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566949 | |
| Qty. | 10 pc(s). | |
| Type | TCC 12.8/26 OR | Version |
| Order No. | 2556380000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566697 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/10 BL | Version |
| Order No. | 2556440000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566956 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/10 BK | Version |
| Order No. | 2556480000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566994 | |
| Qty. | 10 pc(s). | |

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Accessories

| | | |
|------------|----------------------------|-----------------------------|
| Type | TCC 12.8/26 BL | Version |
| Order No. | 2556460000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566970 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/2 OR | Version |
| Order No. | 2556350000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566826 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/2 BK | Version |
| Order No. | 2556470000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566987 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/2 RD | Version |
| Order No. | 2556390000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566901 | |
| Qty. | 10 pc(s). | |
| Type | TCC 12.8/26 BK | Version |
| Order No. | 2556500000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118567014 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/51 OR | Version |
| Order No. | 2556370000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566680 | |
| Qty. | 10 pc(s). | |
| Type | TCC 12.8/26 RD | Version |
| Order No. | 2556420000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566932 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/51 BL | Version |
| Order No. | 2556450000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566963 | |
| Qty. | 10 pc(s). | |

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Accessories

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 TEMR SERIES, 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 | TXS SUPPLY | Version |
| Order No. | 1240780000 | TERMSERIES, Supply module, Number of contacts: 5, , Continuous |
| GTIN (EAN) | 4050118028140 | current: 10 A, Screw connection |
| Qty. | 10 pc(s). | |
| 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 pc(s). | |
| 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 pc(s). | |

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Accessories

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 pc(s). | |

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 pc(s). | |

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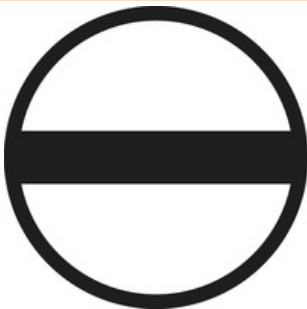
Germany

www.weidmueller.com**Accessories****Crosshead screwdriver Phillips**

VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip

General ordering data

| | | |
|------------|----------------------------|-------------------------------------------------------------------|
| Type | SDIK PHO X 60 | Version |
| Order No. | 2749880000 | Screwdriver, Blade width (B): 0 mm, 60 mm, Blade thickness (A): 0 |
| GTIN (EAN) | 4050118897081 | |
| Qty. | 1 pc(s). | |

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. | 2749340000 | Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm |
| GTIN (EAN) | 4050118895568 | |
| Qty. | 1 pc(s). | |

TRP 24VDC ACT PB

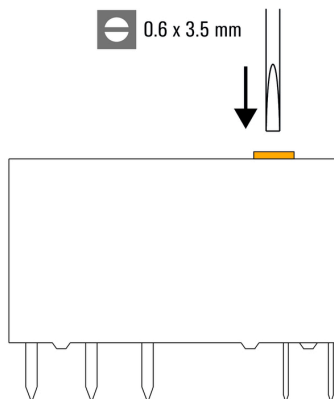
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Drawings

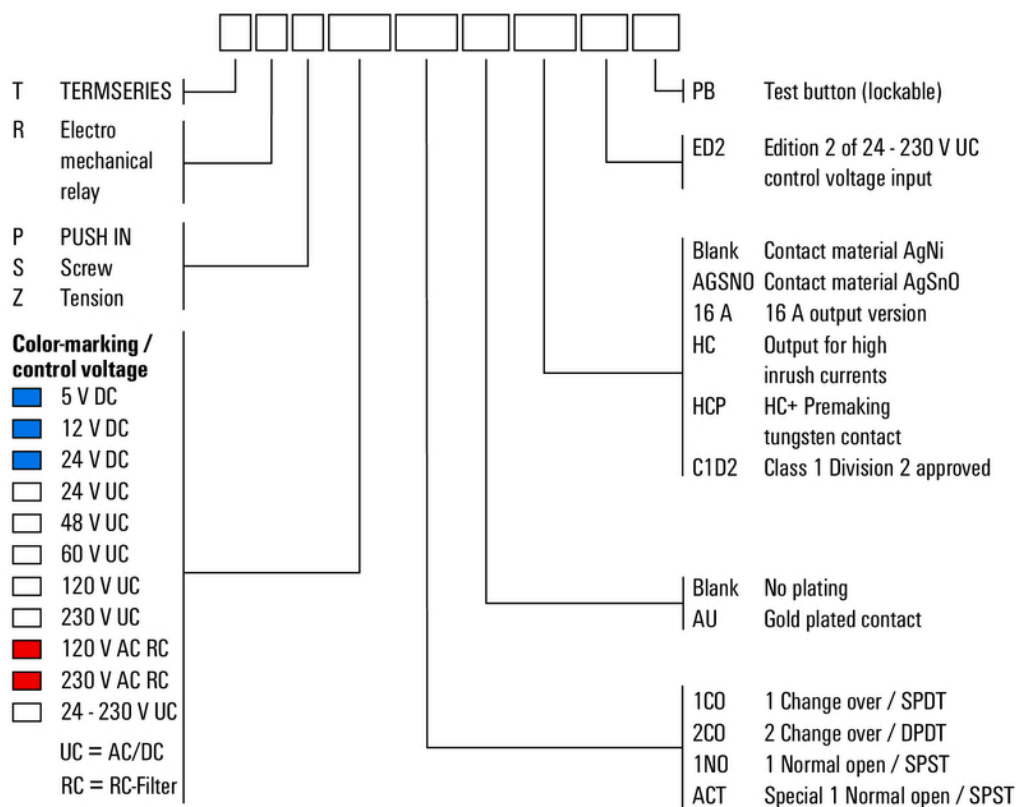
Miscellaneous

Recommended screwdriver for test button



Miscellaneous

Type code TERMSERIES electromechanical relay versions



Type codes

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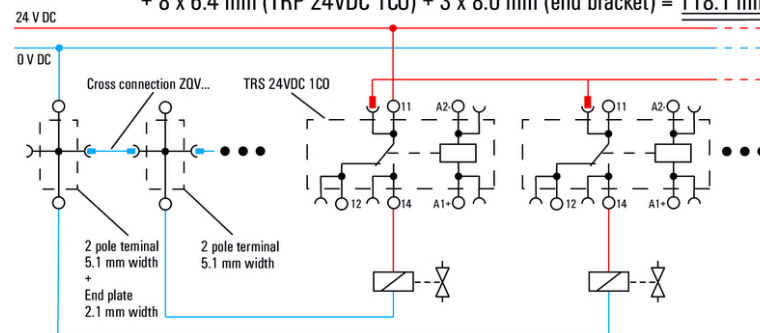
Drawings

Sonstiges

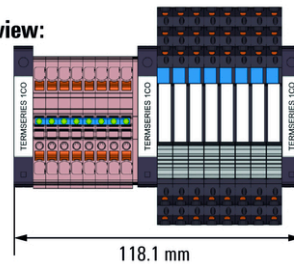
Space requirement for an 8-channel system

with a standard TERMSERIES 1CO relay

Example of output wiring to show the difference in 8 loads to be wired:

Result width = $8 \times 5.1 \text{ mm}$ (2-pole terminal block) + $1 \times 2.1 \text{ mm}$ (end plate)+ $8 \times 6.4 \text{ mm}$ (TRP 24VDC 1CO) + $3 \times 8.0 \text{ mm}$ (end bracket) = 118.1 mm

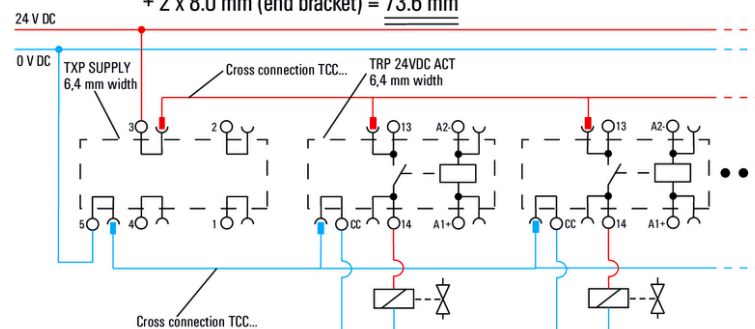
Space requirement top view:



Space requirement for an 8-channel system

with TERMSERIES ACT version relays and supply terminals

Example of output wiring to show the difference in 8 loads to be wired:

Result width = $1 \times 6.4 \text{ mm}$ (TRP SUPPLY) + $8 \times 6.4 \text{ mm}$ (TRP 24VDC ACT)+ $2 \times 8.0 \text{ mm}$ (end bracket) = 73.6 mm

Space requirement top view:

