# TOP 120VAC RC 230VAC1A

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

www.weidmueller.com

## Product image



Similar to illustration




- 1 NO contact (Triac (zero-cross switch))
- 6.4 mm wide
- 1 A AC 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 AC ±10 % , Rated switching voltage: 24...240 V AC, Continuous current: 1 A, PUSH IN |
| Order No. | 2618390000 |
| Type | TOP 120VAC RC 230VAC1A |
| GTIN (EAN) | 4050118670448 |
| Qty. | 10 pc(s). |

Creation date December 5, 2023 10:10:03 AM CET

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## Technical data

### Dimensions and weights

| | | | |
|---|---|---|---|
| Depth | 87.8 mm | Depth (inches) | 3.457 inch |
| Height | 89.4 mm | Height (inches) | 3.52 inch |
| Width | 6.4 mm | Width (inches) | 0.252 inch |
| Net weight | 29 g | | |

### Temperatures

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

### Probability of failure

| | |
|---|---|
| MTTF | 651 Jahre |

### Rated data UL

| | | | |
|---|---|---|---|
| Ambient temperature (operational), max. | 60 °C | Output current derating (ohmic) | 1 A @ 25 °C, 0.3 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 | 120 V AC ±10 % | Nominal control current | 7 mA AC (±20 %) |
| Power rating | 0.84 VA | Status indicator | Green LED |
| Protective circuit | Rectifier, RC element | RC filter | 94 Ω / 100 nF |
| 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 | 24...240 V AC | Continuous current | 1 A |
| Rated switching current | 1 A | Max. switching voltage, AC | 250 V |
| Inrush current | 15 A / 10 ms | Switch-on delay | <11 ms |
| Switch-off delay | <11 ms | Voltage drop at max. load | ≤ 1.6 V |
| Leakage current | <1.5 mA | Min. switching current | 20 mA |
| Short-circuit-proof | No | Protective circuit, load side | RC element |
| Contact type | 1 NO contact (Triac (zero-cross switch)) | Output voltage frequency range | 50 / 60 Hz |
| max. switching frequency (AC control voltage) | 3 Hz | | |

### General data

| | |
|---|---|
| Rail | TS 35 |
| Test button available | No |
| Colour | black |

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| | | |
|---|---|---|
| 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 | 2.5 $kV_{eff}$ | 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. (DNV) | TAA00001E5 | Certificate no. (cULus) | E141197 |

### Connection data

| | | | |
|---|---|---|---|
| Wire connection method | PUSH IN | Stripping length, rated connection | 9 mm |
| Clamping range, rated connection | 1.5 mm² | Clamping range, min. | 0.14 mm² |
| Clamping range, max. | 2.5 mm² | Wire connection cross section AWG, min. | AWG 26 |
| Wire connection cross section AWG, max. | AWG 14 | Wire cross-section, solid, min. | 0.14 mm² |
| Wire cross-section, solid, max. | 1.5 mm² | 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 mm² |
| Wire connection cross section, finely stranded, max. | 2.5 mm² | 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 mm² |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 1.5 mm² | Conductor cross-section, flexible, AEH (DIN 46228-1), min. | 0.14 mm² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 1.5 mm² | Twin wire-end ferrules, min. | 0.5 mm² |
| Twin wire-end ferrules, max. | 1 mm² | Blade size | 0.4 x 2.0 mm |

### Classifications

| | | | |
|---|---|---|---|
| ETIM 6.0 | EC001504 | ETIM 7.0 | EC001504 |
| ETIM 8.0 | EC001504 | ETIM 9.0 | 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 | ECLASS 13.0 | 27371604 |

### Environmental Product Compliance

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

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## 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 |

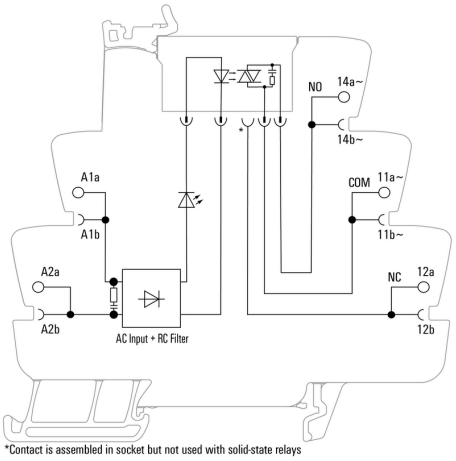
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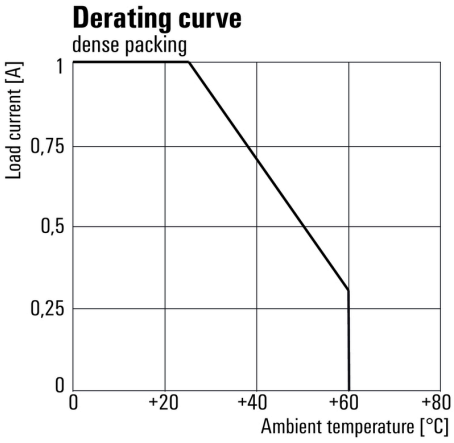
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## Drawings

### Wiring diagram

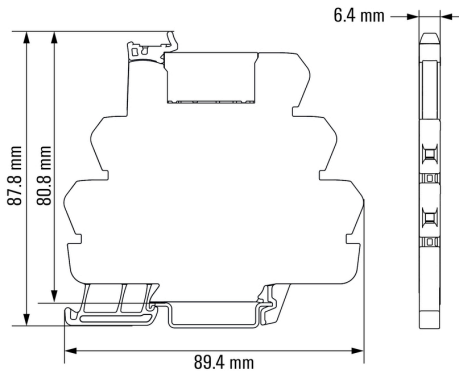



### Graph

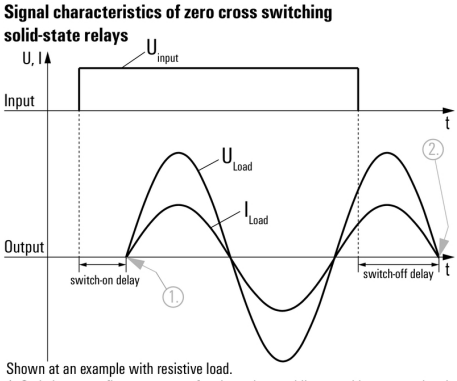



Derating curve

### Dimensional drawing




### Graph




Shown at an example with resistive load.
1. Switches on at first zero cross of mains voltage while control input gets signal.
2. Switches off at next zero cross of mains current after control input signal was switched off.
Switching DC voltages is not possible with this solid-state relays.

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## Accessories

### Blank



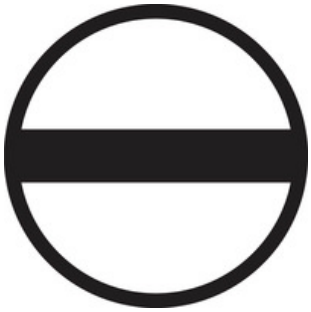
WS markers are the perfect match for the W-series connectors. Thanks to their system compatibility, the WS tags can also be used with the I-series and the Z-series. The large marking surfaces do not only permit long character strings but also multi-line text.
WS markers are ideal for labels with long, 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. | 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). | |

### 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 0.4X2.0X60 | Version |
| Order No. | 2749780000 | Screwdriver, Blade width (B): 2 mm, Blade length: 60 mm, Blade |
| GTIN (EAN) | 4050118896527 | thickness (A): 0.4 mm |
| Qty. | 1 pc(s). | |

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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 crosscconnection 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). | |

### 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 0.4X2.0X60 | Version |
| Order No. | 2749260000 | Screwdriver, Blade width (B): 2 mm, Blade length: 60 mm, Blade |
| GTIN (EAN) | 4050118895537 | thickness (A): 0.4 mm |
| Qty. | 10 pc(s). | |

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## Accessories

### ZQV

#### General ordering data

| | | |
|---|---|---|
| Type | ZQV 1.5N/R6.4/19 GE | Version |
| Order No. | 1193690000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4032248976645 | |
| Qty. | 10 pc(s). | |
| Type | ZQV 1.5N/R6.4/19 BL | Version |
| Order No. | 1391620000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118191813 | |
| Qty. | 10 pc(s). | |
| Type | ZQV 1.5N/R6.4/10 GE | Version |
| Order No. | 1193680000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4032248976454 | |
| Qty. | 10 pc(s). | |
| Type | ZQV 1.5N/R6.4/10 BL | Version |
| Order No. | 1390350000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118190793 | |
| Qty. | 10 pc(s). | |
| Type | ZQV 1.5N/R6.4/2 RT | Version |
| Order No. | 1446090000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118250886 | |
| Qty. | 10 pc(s). | |
| Type | ZQV 1.5N/R6.4/10 RT | Version |
| Order No. | 1391640000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118191660 | |
| Qty. | 10 pc(s). | |
| Type | ZQV 1.5N/R6.4/2 GE | Version |
| Order No. | 1193670000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4032248976638 | |
| Qty. | 10 pc(s). | |
| Type | ZQV 1.5N/R6.4/2 BL | Version |
| Order No. | 1446140000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118251074 | |
| Qty. | 10 pc(s). | |
| Type | ZQV 1.5N/R6.4/10 SW | Version |
| Order No. | 1391630000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118191776 | |
| Qty. | 10 pc(s). | |
| Type | ZQV 1.5N/R6.4/2 SW | Version |
| Order No. | 1446040000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118251067 | |
| Qty. | 10 pc(s). | |

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## Accessories

| | | |
|---|---|---|
| Type | ZQV 1.5N/R6.4/19 SW | Version |
| Order No. | 1391600000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118191806 | |
| Qty. | 10 pc(s). | |

| | | |
|---|---|---|
| Type | ZQV 1.5N/R6.4/19 RT | Version |
| Order No. | 1391610000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118191783 | |
| Qty. | 10 pc(s). | |

### 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 TEMRSERIES,
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 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). | |

| | | |
|---|---|---|
| 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). | |

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## Accessories

### 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 BL | Version |
| Order No. | 2556450000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566963 | |
| 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 BK | Version |
| Order No. | 2556500000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118567014 | |
| 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 BL | Version |
| Order No. | 2556460000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566970 | |
| 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 RD | Version |
| Order No. | 2556410000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566925 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/2 BK | Version |
| Order No. | 2556470000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566987 | |
| Qty. | 10 pc(s). | |

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## Accessories

| | | |
|---|---|---|
| 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 OR | Version |
| Order No. | 2556350000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566826 | |
| Qty. | 10 pc(s). | |
| Type | TCC 6.4/10 BK | Version |
| Order No. | 2556480000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566994 | |
| 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 6.4/51 OR | Version |
| Order No. | 2556370000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566680 | |
| Qty. | 10 pc(s). | |
| 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 6.4/10 BL | Version |
| Order No. | 2556440000 | TERMSERIES, Cross-connector |
| GTIN (EAN) | 4050118566956 | |
| Qty. | 10 pc(s). | |

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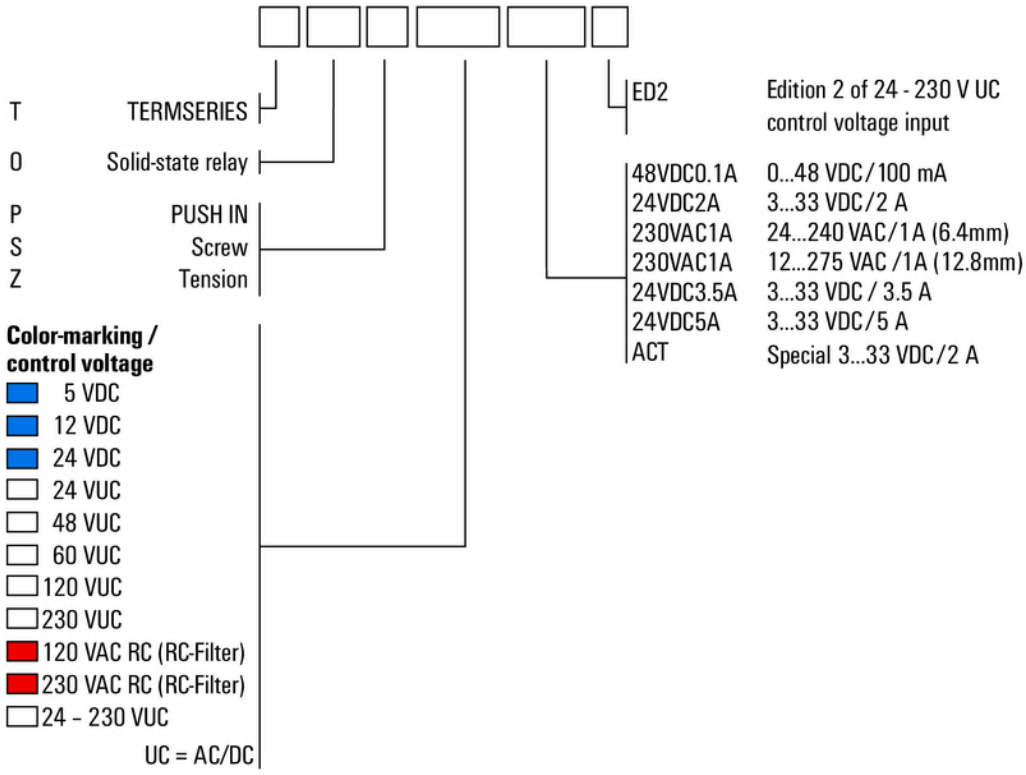
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## Drawings

### Miscellaneous

**Type code TERMSERIES solid-state relay versions**




Type codes