

**TOP 48VUC 230VAC1A****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://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: 48 V UC $\pm 10\%$ , Rated switching voltage: 24...240 V AC, Continuous current: 1 A, PUSH IN |
| Order No.  | <a href="#">2618460000</a>                                                                                                                          |
| Type       | TOP 48VUC 230VAC1A                                                                                                                                  |
| GTIN (EAN) | 4050118670370                                                                                                                                       |
| Qty.       | 10 pc(s).                                                                                                                                           |

Creation date September 13, 2022 9:15:14 AM CEST

Catalogue status 09.09.2022 / We reserve the right to make technical changes.

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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,<br>T <sub>u</sub> = 40°C, without<br>condensation |                       |                |

## Probability of failure

|      |           |
|------|-----------|
| MTTF | 815 Years |
|------|-----------|

## Environmental Product Compliance

|            |                |      |                                      |
|------------|----------------|------|--------------------------------------|
| 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)    | 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,<br>flexible copper conductor | Pollution severity level           | 2                          |

## Control side

|                                                                                   |                  |                                       |                                     |
|-----------------------------------------------------------------------------------|------------------|---------------------------------------|-------------------------------------|
| Rated control voltage                                                             | 48 V UC ±10 %    | Nominal control current               | 6 mA AC (±20 %),<br>4 mA DC (±20 %) |
| Power rating                                                                      | 290 mVA / 192 mW | Pull-in/drop-out voltage, typ.        | 36 V / 19 V AC<br>36 V / 19 V DC    |
| Status indicator                                                                  | Green LED        | Protective circuit                    | Rectifier                           |
| Coil voltage of the replacement relay<br>deviating from the rated control voltage | Yes              | Coil voltage of the replacement relay | 24 V DC                             |

## Load side

|                                                  |               |                                                  |                                          |
|--------------------------------------------------|---------------|--------------------------------------------------|------------------------------------------|
| Rated switching voltage                          | 24...240 V AC | Continuous current                               | 1 A                                      |
| Rated switching current                          | 1 A           | 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<br>voltage) | 3 Hz                                     |
| max. switching frequency (DC control<br>voltage) | 3 Hz          |                                                  |                                          |

## General data

|      |       |
|------|-------|
| Rail | TS 35 |
|------|-------|

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|                                    |                          |                |
|------------------------------------|--------------------------|----------------|
| 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            |
|                                    | 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 <sub>eff</sub> | Dielectric strength to mounting rail                          | 4 kV <sub>eff</sub> / 1 Min. |
| Impulse withstand voltage                        | 6 kV (1.2/50 µs)      | Protection degree                                             | IP20                         |

## Further details of approvals / standards

|                         |            |                         |         |
|-------------------------|------------|-------------------------|---------|
| Certificate No. (DNVGL) | TAA00001E5 | Certificate no. (cULus) | E141197 |
|-------------------------|------------|-------------------------|---------|

## 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.                                                         | 0.14 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. | 0.14 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.                              | 0.14 mm <sup>2</sup> |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max.                              | 1.5 mm <sup>2</sup> | Twin wire-end ferrules, min.                                                            | 0.5 mm <sup>2</sup>  |
| Twin wire-end ferrules, max.                                                            | 1 mm <sup>2</sup>   | Blade size                                                                              | 0.4 x 2.0 mm         |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC001504    | ETIM 7.0    | EC001504    |
| ETIM 8.0    | 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 |

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[www.weidmueller.com](http://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 | <a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">CAD data – STEP</a>                                         |
| Engineering Data                            | <a href="#">EPLAN</a>                                                   |
| User Documentation                          | <a href="#">Beipackzettel / Package Insert – multilingual</a>           |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>                                |

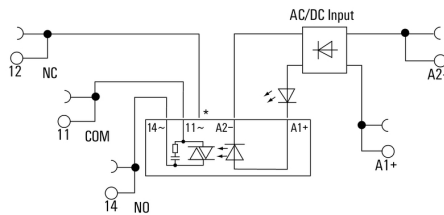
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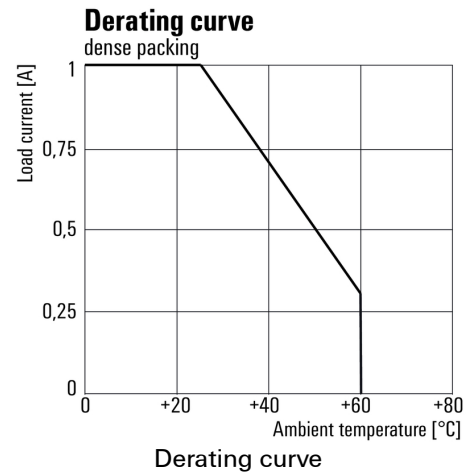
## Drawings

### Wiring diagram

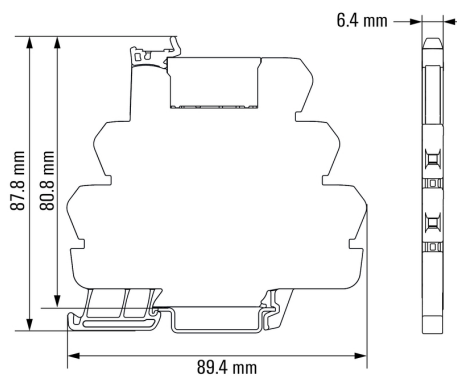


\*Contact is assembled in socket but not used with solid-state relays

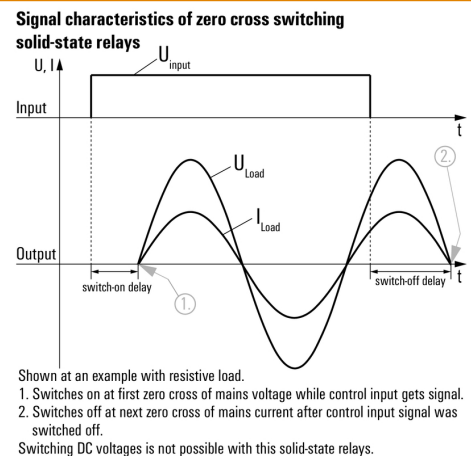
### Graph



### Dimensional drawing



### Graph



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## Drawings

## Miscellaneous

## Type code TERMSERIES solid-state relay versions



Type codes