

TERMOPTO TOP 230VAC/48VDC 0.5A RC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 16

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Germany

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Similar to illustration

TERMOPTO solid-state relay, 5 to 48 V DC 0.5 A output version,

with AC or DC input, available in different versions:

- With PUSH IN connection
- In 6.1 mm width
- With various input protective circuits (free-wheel diode, varistor, RC filter)
- Pluggable cross-connections
- Enclosed design

General ordering data

| | |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type | TOP 230VAC/48VDC 0.5A RC |
| Order No. | 1189260000 |
| Version | TERMOPTO, solid-state relays, 1 NO contact (Transistor). Rated control voltage: 230 V AC +10 %/ -15 % , Rated switching voltage: 5...48 V DC, Continuous current: 500 mA, PUSH IN |
| GTIN (EAN) | 4032248100071 |
| Qty. | 10 pc(s). |

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Technical data**Dimensions and weights**

| | | | |
|------------|---------|-----------------|------------|
| Width | 6.1 mm | Width (inches) | 0.24 inch |
| Height | 79.4 mm | Height (inches) | 3.126 inch |
| Depth | 55 mm | Depth (inches) | 2.165 inch |
| Net weight | 19.5 g | | |

Temperatures

| | | | |
|-----------------------------|----------------------------------------------------------------------------|-----------------------------|----------------|
| Humidity | 5-95% relative humidity, T _u = 40°C, without condensation | Operating temperature, max. | 60 °C |
| Operating temperature, min. | -20 °C | Storage temperature, max. | 80 °C |
| Storage temperature, min. | -40 °C | Operating temperature | -20 °C...60 °C |
| Storage temperature | -40 °C...80 °C | | |

Probability of failure

| | |
|------|-------------|
| MTTF | 2,500 Years |
|------|-------------|

Environmental Product Compliance

| | |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

Control side

| | | | |
|-----------------------|-----------------------|--------------------------|-----------------------|
| Rated control voltage | 230 V AC +10 %/ -15 % | Nominal control current | 6.4 mA AC |
| Power rating | ≤ 1.5 VA | Cut-in / dropout voltage | 207 V / 92 V AC |
| Status indicator | Green LED | Protective circuit | RC element, Rectifier |

Load side

| | | | |
|-----------------------------------------------|-------------|-------------------------------|---------------|
| Rated switching voltage | 5...48 V DC | Continuous current | 500 mA |
| Rated switching current | 500 mA | Load category | DC1 |
| Switch-on delay | < 12.6 ms | Switch-off delay | < 20.8 ms |
| Voltage drop at max. load | < 1 V | Leakage current | < 10 µA |
| Short-circuit-proof | No | Protective circuit, load side | Diode circuit |
| max. switching frequency (AC control voltage) | 10 Hz | | |

Contact data

| | |
|--------------|---------------------------|
| Contact type | 1 NO contact (Transistor) |
|--------------|---------------------------|

General data

| | | | |
|---------------------------|-------|--------|-------|
| Rail | TS 35 | Colour | black |
| UL 94 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 | > 3 mm |
| Dielectric strength for control side - load side | 1.2 kV _{eff} / 1 min. | Impulse withstand voltage | 4 kV (1.2/50 µs) |
| Protection degree | IP20 | | |

Creation date May 14, 2019 4:06:00 AM CEST

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Technical data**Further details of approvals / standards**

| | | | |
|-----------|--------------------------------|-------------------------|---------|
| Standards | DIN EN 50178, IEC 62314, UL508 | Certificate no. (cULus) | E223474 |
|-----------|--------------------------------|-------------------------|---------|

Connection data

| | | | |
|-----------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------------|---------------------|
| Wire connection method | PUSH IN | Stripping length, rated connection | 10 mm |
| Clamping range, rated connection | 1.5 mm ² | Clamping range, min. | 0.5 mm ² |
| Clamping range, max. | 2.5 mm ² | Wire connection cross section AWG, min. | AWG 20 |
| Wire connection cross section AWG, max. | AWG 14 | Wire cross-section, solid, min. | 0.5 mm ² |
| Wire cross-section, solid, max. | 1.5 mm ² | Wire connection cross-section, finely stranded, min. | 0.5 mm ² |
| Wire connection cross section, finely stranded, max. | 1.5 mm ² | Wire cross-section, finely stranded, min. (AWG) | AWG 20 |
| Wire cross-section, finely stranded, max. (AWG) | AWG 14 | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.5 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. | 0.5 mm ² |
| Conductor cross-section, flexible, AEH (DIN 46228-1), max. | 1.5 mm ² | Blade size | 0.6 x 3.5 mm |

Classifications

| | | | |
|------------|-------------|------------|-------------|
| ETIM 3.0 | EC001504 | ETIM 4.0 | EC001504 |
| ETIM 5.0 | EC001504 | ETIM 6.0 | EC001504 |
| eClass 5.1 | 27-27-09-90 | eClass 6.2 | 27-26-15-03 |
| eClass 7.1 | 27-26-15-03 | eClass 8.1 | 27-26-15-03 |
| eClass 9.0 | 27-37-16-04 | eClass 9.1 | 27-37-16-04 |

Approvals

Approvals



ROHS Conform

Downloads

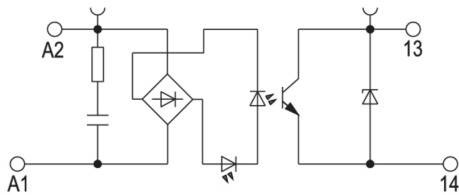
| | |
|---------------------------------------------|-------------------------------------------|
| Approval/Certificate/Document of Conformity | DE_PA_5600_160301_001.pdf |
| Brochure/Catalogue | CAT 4.2 ELECTR 18/19 EN |
| Engineering Data | EPLAN.WSCAD |
| Engineering Data | STEP |
| User Documentation | Operating Instructions |

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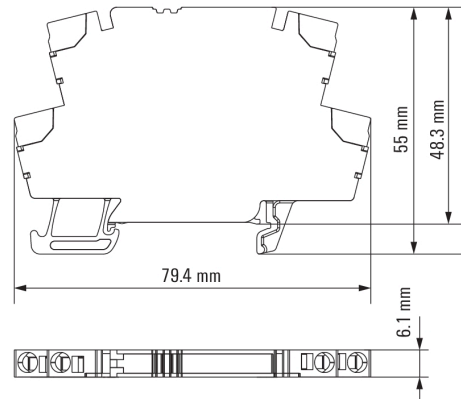
Drawings

Wiring diagram

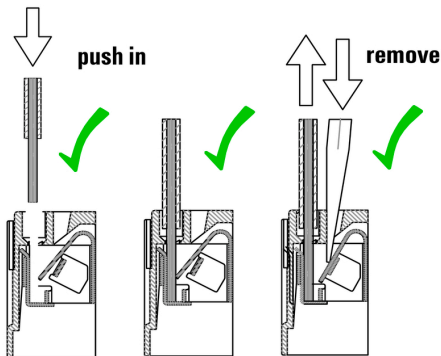


Schaltsymbol

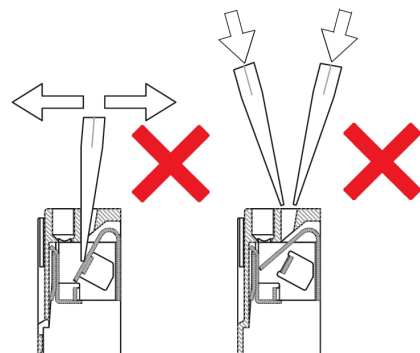
Dimensional drawing



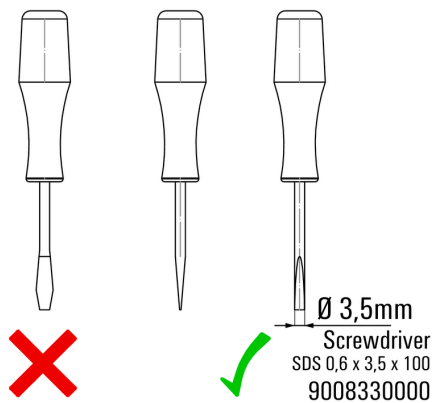
Correct handling PUSH IN connection



Wrong handling PUSH IN connection



Recommended screwdriver

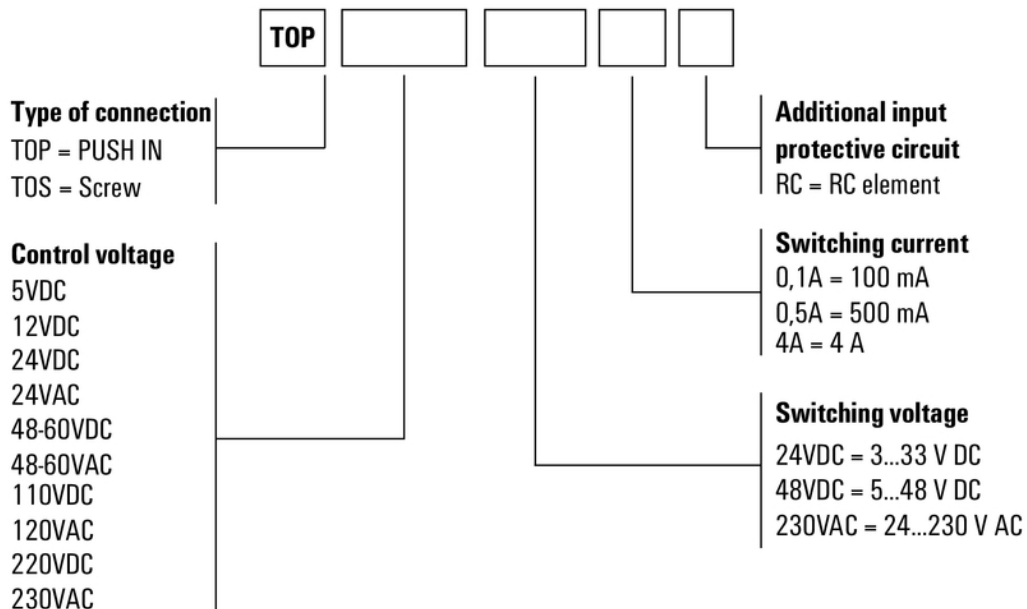


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Drawings

Miscellaneous



Type codes