

Description

Single pole thermal circuit breaker with push-to-reset, tease-free, trip-free, snap action mechanism (R-type TO CBE to EN 60934; M-type when fitted with optional manual release feature). Designed for plug-in mounting with E-T-A sockets 10 and 16.

Typical applications

Extra low voltage wiring systems and components.

Ordering information

| | |
|----------------------------------------|-------------------------|
| Type No. | |
| 2-5200 | plug-in |
| Manual release (optional) | |
| H | manual release facility |
| Current ratings | |
| 0.05...16 A | |
| 2-5200 - H - 5 A ordering example | |

Please be informed that we have minimum ordering quantities to be observed.

Standard current ratings and typical internal resistance values

| Current rating (A) | Internal resistance (Ω) | Current rating (A) | Internal resistance (Ω) |
|--------------------|-------------------------|--------------------|-------------------------|
| 0.05 | 280 | 2.5 | 0.2 |
| 0.08 | 100 | 3 | 0.1 |
| 0.1 | 110 | 3,5 | 0.065 |
| 0.2 | 29 | 4 | 0.065 |
| 0.3 | 14 | 4.5 | 0.05 |
| 0.4 | 7 | 5 | 0.05 |
| 0.5 | 4.9 | 6 | 0.02 |
| 0.6 | 3.4 | 7 | 0.02 |
| 0.7 | 2.5 | 8 | < 0.02 |
| 0.8 | 1.8 | 10 | < 0.02 |
| 1 | 1.2 | 12 | < 0.02 |
| 1.2 | 0.84 | 13 | < 0.02 |
| 1.5 | 0.6 | 15 | < 0.02 |
| 1.8 | 0.4 | 16 | < 0.02 |
| 2 | 0.25 | | |

Approvals

| Authority | Standard | Rated voltage | Current ratings |
|-----------|--------------|---------------------|--------------------------------|
| UL | UL 1077 | AC 250 V DC 50 V | 0.05 A...20 A 0.05 A...25 A |
| CSA | C22.2 No 235 | AC 250 V DC 50 V | 0.05 A...20 A 0.05 A...25 A |



2-5200-...

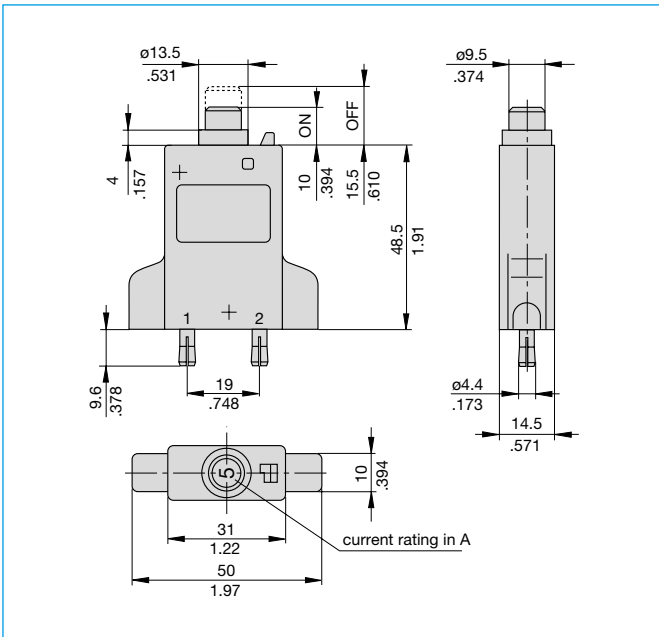
Technical data

For further details please see: www.e-t-a.de/ti_e

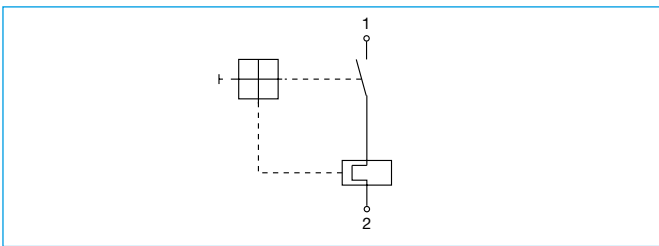
| | | |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------|
| Voltage rating | DC 28 V (UL: AC 250; DC 50 V) | |
| Current rating range | 0.05...16 A (up to 25 A to special order) | |
| Typical life | AC 250 V / DC 28 V: 0.05...16 A 5,000 operations at 2 x I _N , inductive | |
| Ambient temperature | -20...+60 °C (-4...+140 °F) | |
| Insulation co-ordination (IEC 60664 and 60664 A) | rated impulse withstand voltage 2.5 kV | pollution degree 2 |
| Dielectric strength (IEC 60664 and 60664A) operating area | test voltage AC 1,500 V | |
| Insulation resistance | > 100 MΩ (DC 500 V) | |
| Interrupting capacity I _{cn} | 0.05...2.5 A 3...5 A 6...16 A | 8 x I _N 20 x I _N 400 A |
| Interrupting capacity (UL 1077) | U _N AC 250 V DC 50 V | 2,000 A 2,500 A |
| Degree of protection (IEC 60529/DIN 40050) | operating area IP40 terminal area IP00 | |
| Vibration | 8 g (57 to 500 Hz) ± 0.61 mm, (10-57 Hz), to IEC 60068-2-6, test Fc, | |
| Shock | 25 g (11 ms) to IEC 60068-2-27, test Ea | |
| Corrosion | 96 hours at 5 % salt mist, to IEC 60068-2-11, test Ka | |
| Humidity | 240 hours at 95 % RH to IEC 60068-2-78, test Cab | |
| Mass | approx. 35 g | |

All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.

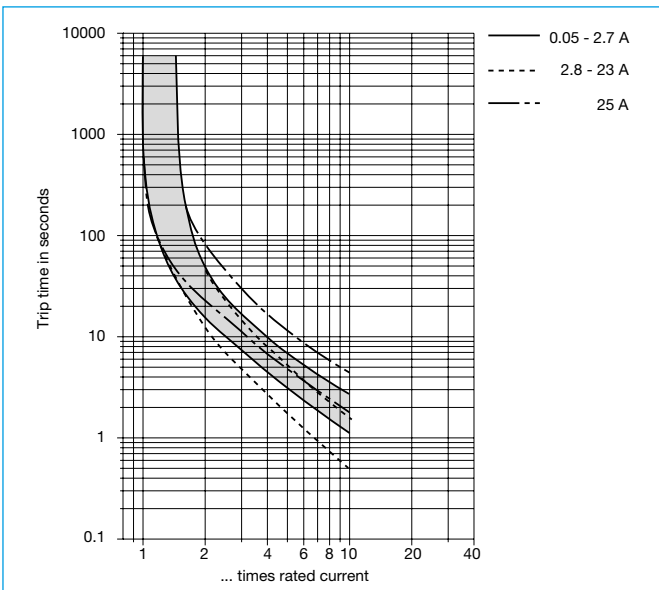
Dimensions



Internal connection diagram



Typical time/current characteristics at +23 °C/+73.4 °F

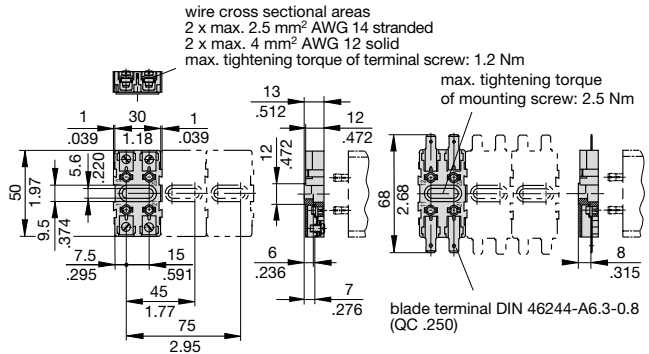


The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below. See also section Technical information.

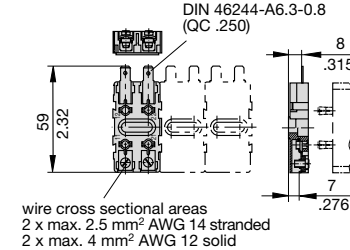
| Ambient temperature °F | -4 | +14 | +32 | +73.4 | +104 | +122 | +140 |
|------------------------|------|------|------|-------|------|------|------|
| °C | -20 | -10 | 0 | +23 | +40 | +50 | +60 |
| Derating factor | 0.76 | 0.84 | 0.92 | 1 | 1.08 | 1.16 | 1.24 |

Accessories

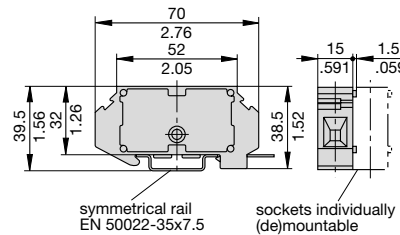
Sockets 10R-K10



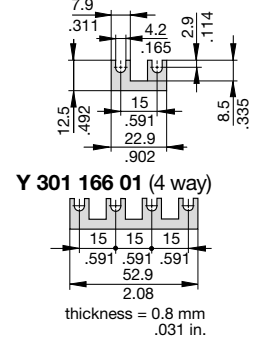
10R-A10



Socket 16 (up to 16 A max. load)



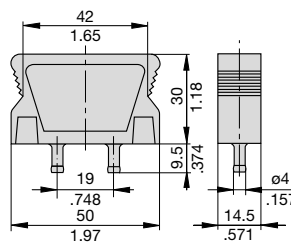
Bus bar for sockets 10... Y 301 166 02 (2 way)



Adapter for EN rail 50035-G32 (specified as a separate item) X 200 409 01 for socket 16 available on request

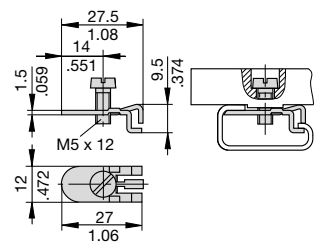
Blanking plug Y 301 477 01

for sockets 10R-P10/K10



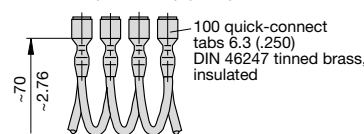
Terminal for mounting rack X 200 800 01

for sockets 10R, 10F on
EN rail 50 035-G32



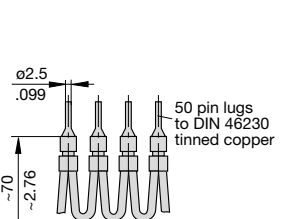
Connector bus links -P10

- X 210 588 01/
1.5 mm² (AWG 16) (brown)
- X 210 588 02/
2.5 mm² (AWG 14) (black)
- X 210 588 03/
2.5 mm² (AWG 14) (red)
- X 210 588 04/
2.5 mm² (AWG 14) (blue)



Connector bus links -K10

- X 210 589 01/
2.5 mm² (AWG 14) (black)
- X 210 589 02/
1.5 mm² (AWG 16) (brown)



1.5 mm² - up to 13 A max. load
 2.5 mm² - up to 20 A max. load

This is a metric design and millimeter dimensions take precedence (mm/inch)