

Circuit Breaker for Equipment thermal, Threaded-neck type, 1 pole



T9-311: Threaded neck type with nut nickel-plated



Description

- Threaded neck type
- Thermal circuit breaker
- 1-pole
- On request available with elevated glow-wire ratings
- Quick connect terminal 6.3 x 0.8 mm

Unique Selling Proposition

- Reset type
- Cycling trip-free release
- Compact design
- Different mounting possibilities

Standards

- Approval Reference Type: T9
- IEC 60934
- UL 1077
- CSA C22.2 No. 235
- GB 17701

Applications

- Power supplies
- Uninterruptible power supply
- Power tools
- Industrial appliances
- HVAC
- Household appliances

Weblinks

[pdf datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#)

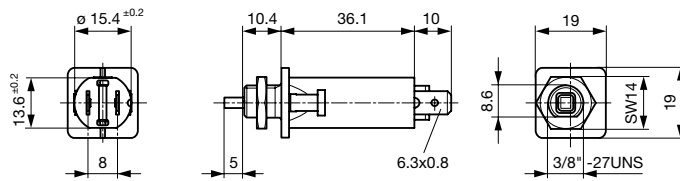
Technical Data

| | | | |
|------------------------------------|---|---------------------|------------------------|
| Rated Voltage AC | 240 V, 50 / 60 Hz | Ambient temperature | 3 A: -5 °C to 60 °C |
| Rated Voltage DC | 48 / 32 V, see approvals | | 4 A: -5°C to 50 °C |
| Rated current | 3-16 A, see approbations | | 5-16 A: -5 °C to 60 °C |
| Conditional short circuit capacity | IEC: Inc, PC1, AC 240 V: 2 kA | Weight | 9 - 13 g |
| | UL / CSA: SC, AC 240 V DC 48 / 32 V: 2 kA, C1 | | |
| Degree of protection front side | IP 40 | | |
| Endurance minimum | IEC: 200% I _r , cos φ 0.6: min. 50 switching cycles | | |
| Endurance typical | 3-8 A: 150% I _r , cos φ 0.9: 2500 switching cycles | | |
| | 10-16 A: 150% I _r , cos φ 0.9: 6000 switching cycles | | |
| Dielectric Strength | 1500 VAC | | |
| Insulation Resistance | 500 VDC > 1000 MΩ | | |

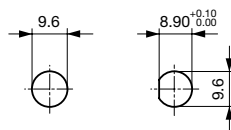
Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [General Product Information](#)

Dimension [mm]

T9-211/311

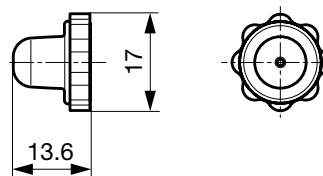
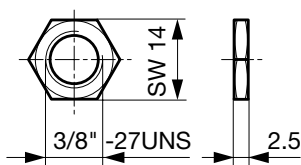






Panel thickness $s = 0.8 - 5.5$ mm



Hexagonal nut TZZ12 / TZZ51

Cover TZZ31 für IP65 optional, see accessory

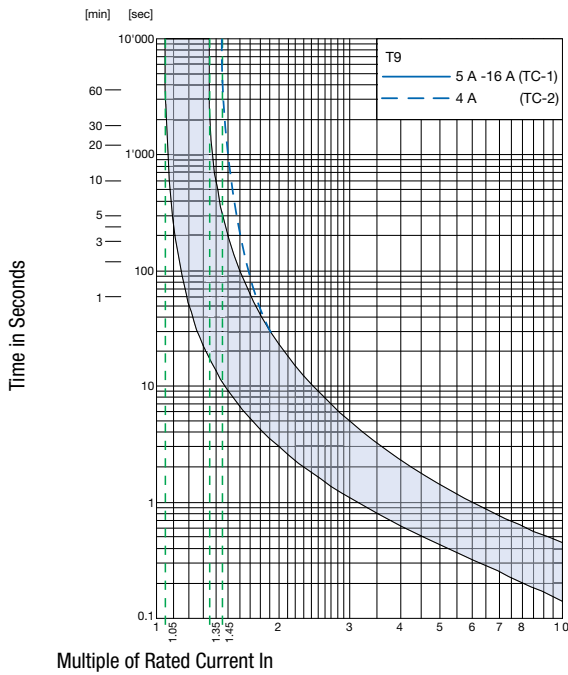


| Approval | | Rated current | Rated voltage AC | Rated voltage DC |
|---|--------------|---------------|------------------|------------------|
|  US | UL 1077 | 3 - 12 A | 240 V | 48 V |
| | | 14 - 16 A | 240 V | 32 V |
|  US | CSA 22.2 235 | 3 - 12 A | 240 V | 48 V |
| | | 14 - 16 A | 240 V | 32 V |
|  | IEC 60934 | 3 - 12 A | 240 V | 48 V |
| | | 14 - 16 A | 240 V | 32 V |
|  | GB 17701 | 3 - 12 A | 240 V | 48 V |
| | | 14 - 16 A | 240 V | 32 V |

Typical internal resistance

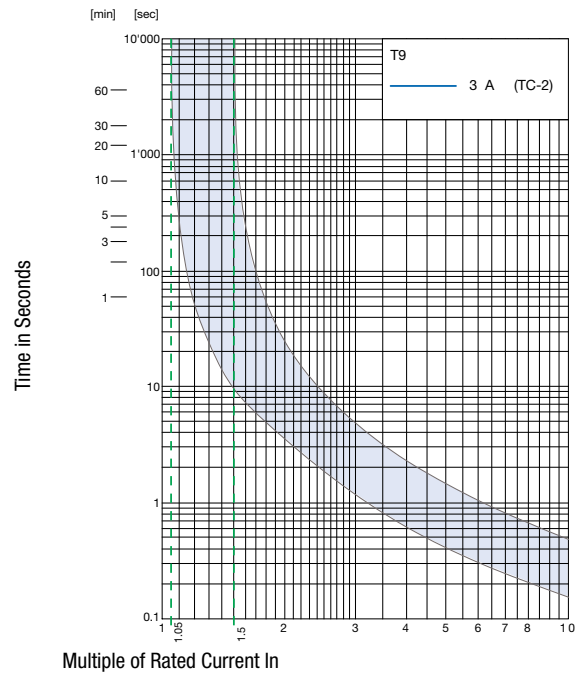
| Rated Current [A] | Internal Resistance [mΩ] |
|-------------------|--------------------------|
| 3 | 65.0 |
| 4 | 21.6 |
| 5 | 23.6 |
| 6 | 16.3 |
| 7 | 15.3 |
| 8 | 12.9 |
| 10 | 7.3 |
| 12 | 7.0 |
| 14 | 4.8 |
| 15 | 4.3 |
| 16 | 3.9 |

Time-Current-Curves



Multiple of Rated Current In

Reference Temperature +23°



Multiple of Rated Current In

Reference Temperature +23°

Effect of ambient temperature

The units are calibrated for an ambient temperature of +23°C. To determine the rated current for a lower or higher ambient temperature, use a correction factor (typical value) from the table below:

| Ambient temperature [°C] | Correction factor |
|--------------------------|-------------------|
| -5 | 0,85 |
| +10 | 0,95 |
| +23 | 1,00 |
| +40 | 1,08 |
| +60 | 1,21 |

Example: Rated current = 10 A; Environmental temperature = 60 °C; --> Correction factor = 1.21; Resulting current = 12.1 A --> Fount to next higher rated current: 13 A

Accessory

| Part Number | Type | Resources / Description |
|-------------|-----------|--|
| 4404.0039 | TZZ31 | Protection cover for IP 65 |
| 4400.0420 | TZZ11 | Knurled nut nickel-plated |
| 4400.0559 | TZZ11-414 | Knurled nut black |
| 4400.0425 | TZZ12 | Additional hexagonal nut nickel-plated |
| 4404.0072 | TZZ51 | Additional hexagonal nut PA 66 |

Variants

| Mounting | Front printing | Rated current | Order Number |
|--------------------|------------------------------------|---------------|--------------|
| Threaded-neck type | Rated current not printed on front | 3.0 A | 4404.0049 |
| Threaded-neck type | Rated current not printed on front | 4.0 A | 4404.0019 |
| Threaded-neck type | Rated current not printed on front | 5.0 A | 4404.0025 |
| Threaded-neck type | Rated current not printed on front | 6.0 | 4404.0020 |
| Threaded-neck type | Rated current not printed on front | 7.0 A | 4404.0027 |
| Threaded-neck type | Rated current not printed on front | 8.0 A | 4404.0021 |

| Mounting | Front printing | Rated current | Order Number | |
|--------------------|------------------------------------|---------------|---------------------------|---|
| Threaded-neck type | Rated current not printed on front | 10.0 A | 4404.0022 | ■ |
| Threaded-neck type | Rated current not printed on front | 12.0 A | 4404.0023 | ■ |
| Threaded-neck type | Rated current not printed on front | 14.0 A | 4404.0026 | ■ |
| Threaded-neck type | Rated current not printed on front | 15.0 A | 4404.0028 | ■ |
| Threaded-neck type | Rated current not printed on front | 16.0 A | 4404.0024 | ■ |

■ Most Popular.

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

Packaging Unit 100 Pcs