

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



See below:
Approvals and Compliances

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

Applications

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

Weblinks

[pdf data sheet](#), [html datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#)

Technical Data

| | |
|----------------------------------------|-------------------------------------------------------|
| Rated Voltage AC | 240 |
| Rated Voltage DC | 48/32 |
| Rated current | 3-16 A, see approbations |
| Conditional short circuit capacity Inc | IEC 60934: PC1, AC 240 V: 2 kA |
| | UL / CSA: SC, AC 240 V DC 48 / 32 V: 2 kA, C1 |
| Degree of protection front side | IP40 |
| Endurance minimum | IEC: 200% Ir, cos φ 0.6: min. 50 switching cycles |
| Endurance typical | 3-8 A: 150% Ir, cos φ 0.9: 2500 switching cycles |
| | 10-16 A: 150% Ir, cos φ 0.9: 6000 switching cycles |
| Dielectric Strength | 1500 VAC |
| Insulation Resistance | 500 VDC > 1000 MΩ |

| | |
|---------------------------|------------------------|
| Allowable Operation Temp. | 3 A: -5 °C to 60 °C |
| | 4 A: -5°C to 50 °C |
| | 5-16 A: -5 °C to 60 °C |
| Weight | 9 - 13 g |

Approvals and Compliances

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

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products.

Approval Reference Type: T9

| Approval Logo | Certificates | Certification Body | Description |
|---------------|-------------------------------|--------------------|------------------------------------------|
| | VDE Approvals | VDE | VDE Certificate Number: 40038016 |
| | UL Approvals | UL | UL File Number: E71572 |
| | CCC Approvals | CCC | CCC Certificate Number: 2024010307702466 |

Product standards

Product standards that are referenced

| Organization | Design | Standard | Description |
|--------------|-----------------------|-------------------|-----------------------------------------------------------------------|
| | Designed according to | IEC 60934 | Circuit-breakers for equipment (CBE) |
| | Designed according to | UL 1077 | Standard for Supplementary Protectors for Use in Electrical Equipment |
| | Designed according to | CSA C22.2 No. 235 | Supplementary Protectors |
| | Designed according to | GB 17701 | Circuit-breaker for equipment |

Application standards

Application standards where the product can be used

| Organization | Design | Standard | Description |
|--------------|--------------------------------|----------------|-----------------------------------------------------------------------------------------------|
| | Suitable for applications acc. | IEC/UL 62368-1 | Audio/video, information and communication technology equipment - Part 1: Safety requirements |

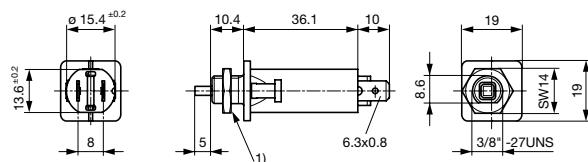
Compliances

The product complies with following Guide Lines

| Identification | Details | Initiator | Description |
|----------------|--------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
| | UKCA declaration of conformity | SCHURTER AG | The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008. |
| | RoHS | SCHURTER AG | Directive RoHS 2011/65/EU, Amendment (EU) 2015/863 |
| | China RoHS | SCHURTER AG | The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS. |
| | REACH | SCHURTER AG | On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force. |

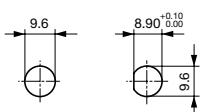
Dimension [mm]

T9-211/311



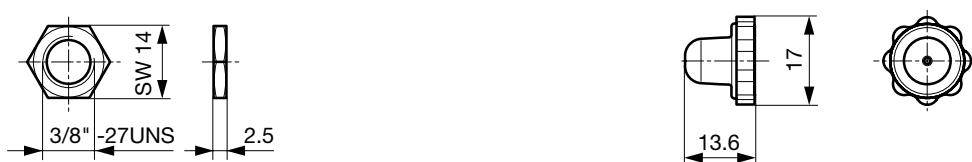
Panel thickness 0.8 - 5.5 mm

1) max. torque: 0.6Nm



Hexagonal nut TZZ12 / TZZ51

Cover TZZ31 für IP65 optional, see accessory

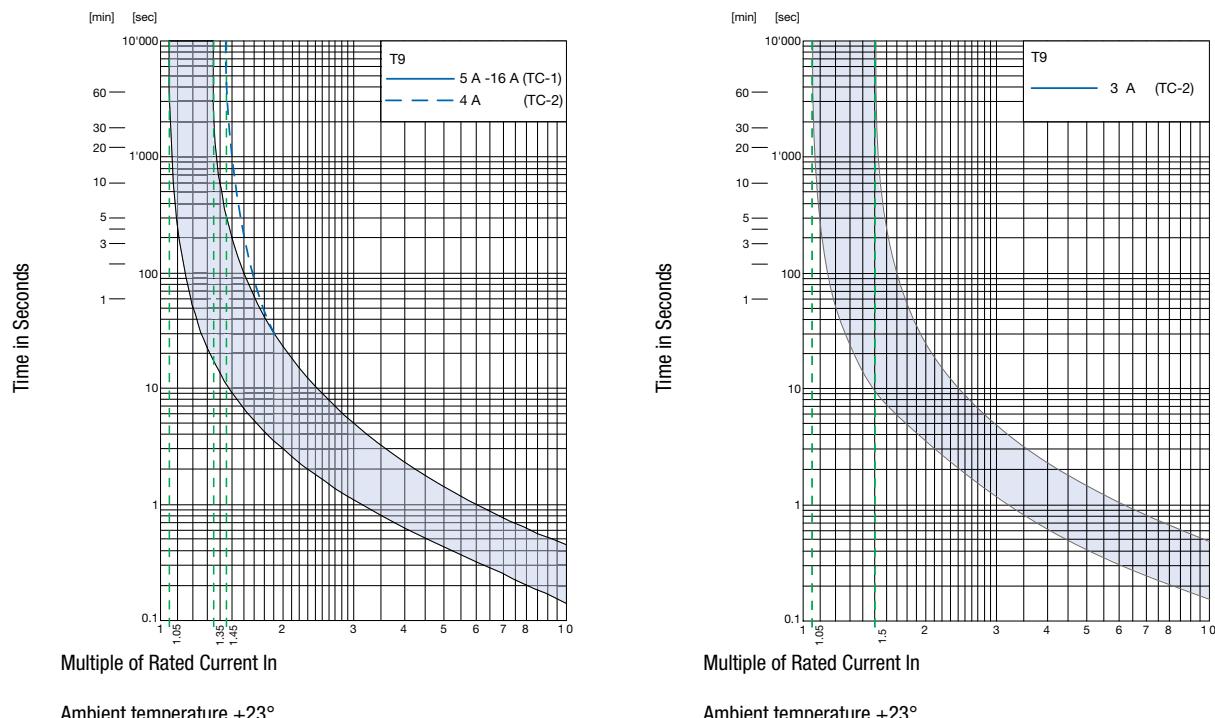


| Approval | | Rated current | Rated Voltage AC | Rated Voltage DC |
|----------|--------------|-----------------------|------------------|------------------|
| | UL 1077 | 3 - 12 A 14 - 16 A | 240 V 240 V | 48 V 32 V |
| | CSA 22.2 235 | 3 - 12 A 14 - 16 A | 240 V 240 V | 48 V 32 V |
| | IEC 60934 |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

Typical internal resistance per pole

| 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



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 --> Round to next higher rated current: 13 A

Accessories

| Part Number | Type | Resources / Description |
|-------------|-----------|----------------------------------------|
| 4404.0039 | TZZ31 | Protection cover for IP65 |
| 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 |
| 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 |

Availability for all products can be searched real-time: <https://www.schurter.com/en/info-center/support-tools/stock-check-distributors>

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|-----------------------|---------|
| Packaging Unit | 100 Pcs |
|-----------------------|---------|