

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

- Ausgelegt gemäss
- 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

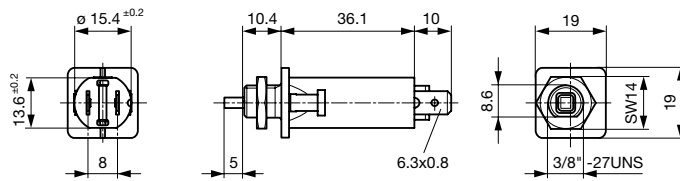
Rated Voltage AC	240 V, 50 / 60 Hz
Rated Voltage DC	48 / 32 V, see approvals
Rated current	3-16 A, see approbations
Conditional short circuit capacity	IEC: Inc, PC1, AC 240 V: 2 kA  UL / CSA: SC, AC 240 V DC 48 / 32 V: 2 kA, C1
Degree of protection front side	IP 40
Endurance minimum	IEC: 200% I <sub>r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

Ambient temperature	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

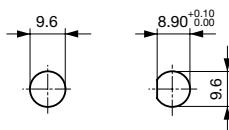
Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [General Product Information](#)

## Dimension [mm]

T9-211/311

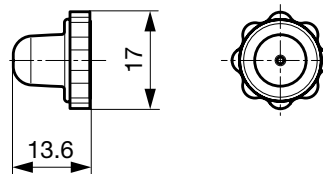
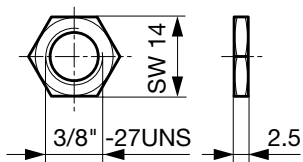


Panel thickness  $s = 0.8 - 5.5$  mm



Hexagonal nut TZZ12 / TZZ51

Cover TZZ31 für IP65 optional, see accessory

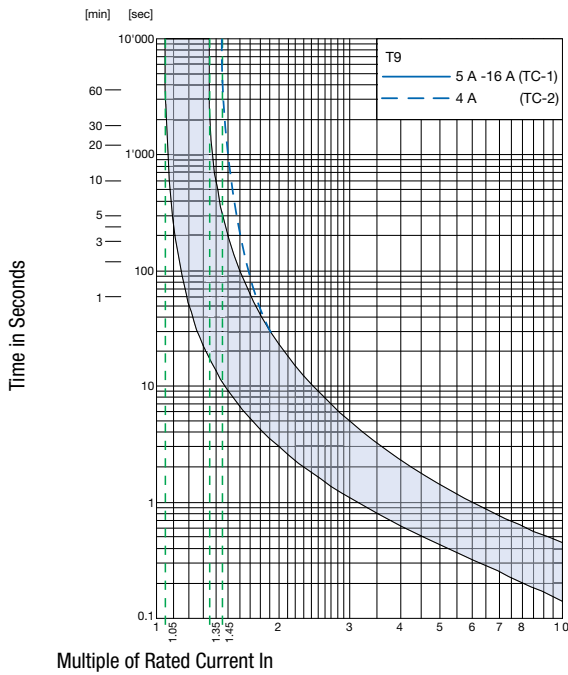


Approval		Rated current	Rated voltage AC	Rated voltage DC
	UL 1077	3 - 12 A	240 V	48 V
		14 - 16 A	240 V	32 V
	CSA 22.2 235	3 - 12 A	240 V	48 V
		14 - 16 A	240 V	32 V
	IEC 60934	3 - 12 A	240 V	48 V
		14 - 16 A	240 V	32 V
	GB 17701	3 - 12 A	240 V	48 V
		14 - 16 A	240 V	32 V

## Typical internal resistance

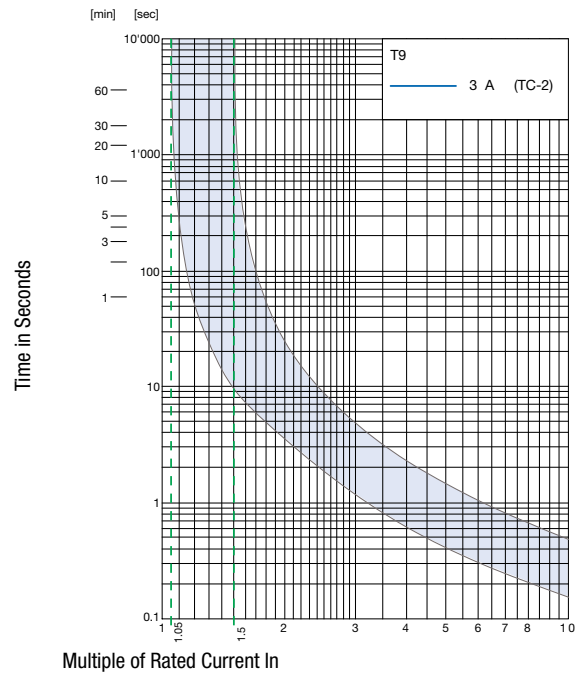
Rated Current [A]	Internal Resistance [mΩ]
3	65.0
4	21.6
5	23.6
6	16.3
7	15.3
8	12.9
10	7.3
12	7.0
14	4.8
15	4.3
16	3.9

**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 A	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:<http://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

**Packaging Unit** 100 Pcs