

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
- Reset type
- Cycling trip-free release
- Quick connect terminal 6.3 x 0.8 mm

Standards

- IEC 60934
- UL 1077
- CSA C22.2 235
- GB 17701

Characteristics

- Designed for standard and medical 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](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

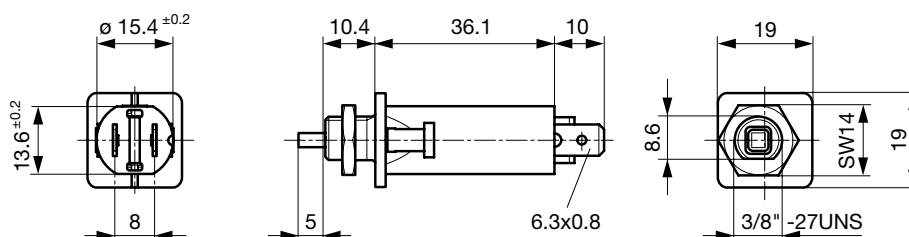
Technical Data

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 240V: 2kA
	UL / CSA: SC, AC 240 V DC 48 / 32 V: 2 kA, C1
Degree of protection front side	IP 40
Endurance minimum	IEC: 200% In, cos phi 0.6: min. 50 cycles
Endurance typical	3-8 A; 150% In, cos phi 0.9: 2500 cycles 10-16 A; 150% In, cos phi 0.9: 6000 cycles
Dielectric Strength	1500 VAC
Insulation resistance	500 VDC > 1000 MΩ

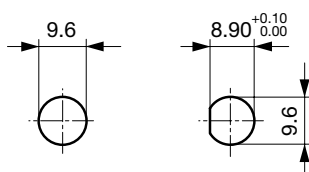
Ambient temperature	3 A: -5 °C to 60 °C
	4 A: -30 °C to 50 °C
	5-16 A: -30 °C to 60 °C
Weight	9 - 13 g

Dimensions

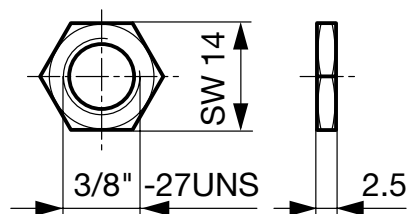
T9-211/311



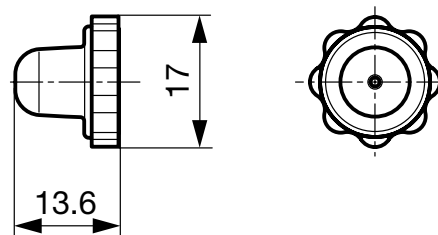
Pannel thickness s = 0.8 - 5.5 mm



Hexagonal nut TZZ12 / TZZ51



Cover TZZ31 für IP65 optional, see accessory



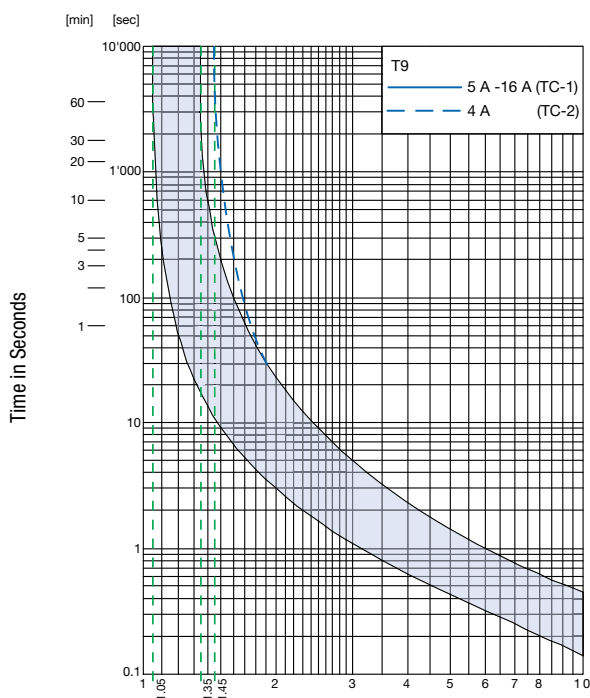
Approvals

Approval		Rated current	Rated voltage AC	Rated voltage DC
 US	UL 1077	3 - 12 A 14 - 16 A	240 V 240 V	48 V 32 V
 US	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	4 - 12 A 14 - 16 A	240 V 240 V	48 V 32 V

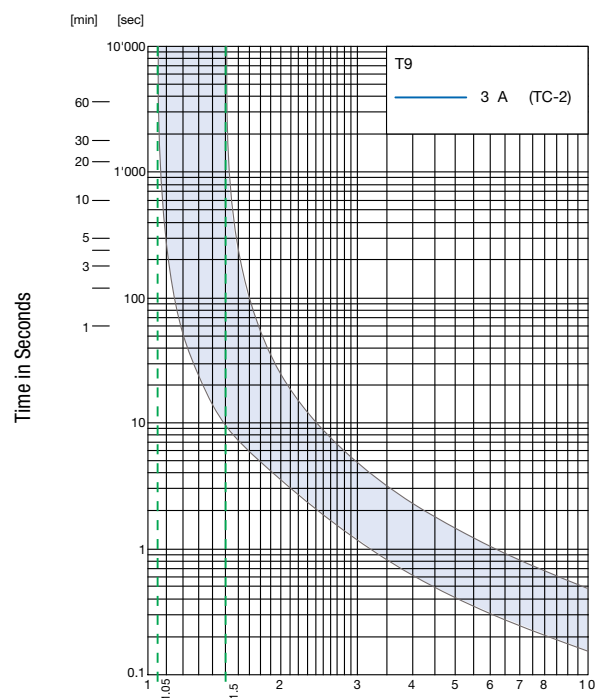
Typical internal resistance

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 at +23°C	10,0 A
Ambient temperature [°C]	+60°C
Correction factor	1,21
Chosen rated current at +60°C ambient temperature	$10,0 \text{ A} \times 1,21 = 12,1 \text{ A}^*$

* Please select the next higher rated current

Variants

Mounting	Front printing	Rated current	Order Number
Threaded-neck type	Rated current not printed on front	3A	4404.0049
Threaded-neck type	Rated current not printed on front	4A	4404.0019
Threaded-neck type	Rated current not printed on front	5A	4404.0025
Threaded-neck type	Rated current not printed on front	6A	4404.0020
Threaded-neck type	Rated current not printed on front	7A	4404.0027
Threaded-neck type	Rated current not printed on front	8A	4404.0021
Threaded-neck type	Rated current not printed on front	10A	4404.0022
Threaded-neck type	Rated current not printed on front	12A	4404.0023
Threaded-neck type	Rated current not printed on front	14A	4404.0026
Threaded-neck type	Rated current not printed on front	15A	4404.0028
Threaded-neck type	Rated current not printed on front	16A	4404.0024

Packaging Unit 100 Pcs**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