# T12-211

Circuit Breaker for Equipment thermal, Threaded neck type, Reset type, Quick connect terminals




## Description
- Threaded neck type
- Thermal circuit breaker
- 1-pole
- Reset type
- Positively trip-free release
- Quick connect terminals 6.3 x 0.8 mm

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

## Applications
- Power supplies
- Uninterruptible power supply
- Power tools
- Household appliances

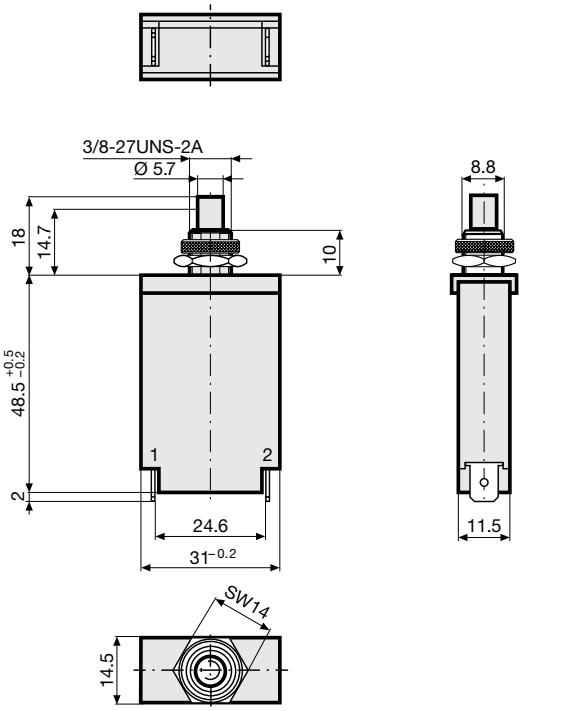
## Weblinks
pdf-datasheet, html-datasheet, General Product Information, Approvals, CE declaration of conformity, RoHS, CHINA-RoHS, REACH, e-Shop, SCHURTER-Stock-Check, Distributor-Stock-Check, Detailed request for product, Product News

## Technical Data

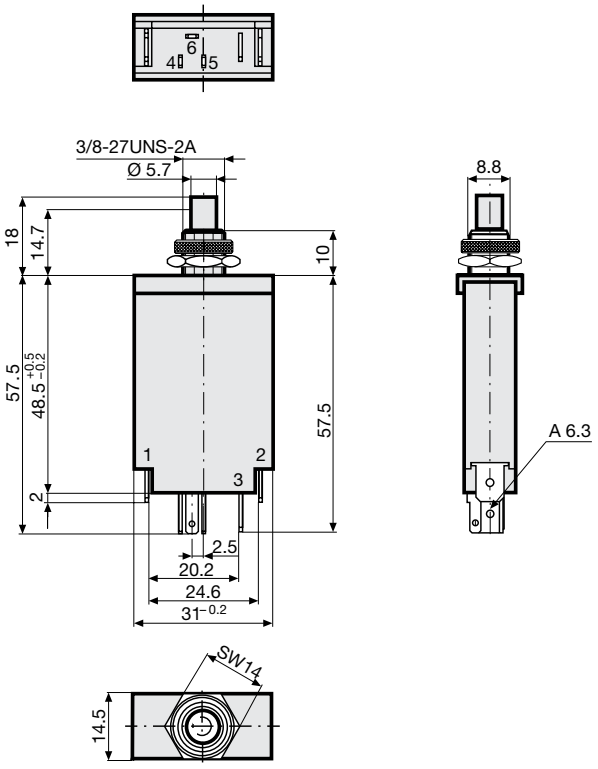
| | |
|---|---|
| Rated Voltage AC | 240 V; 50/60 Hz |
| Rated Voltage DC | 28 V |
| Rated current range AC | 0.05 - 15/16 A , see approbations |
| Conditional short circuit capacity | IEC: Inc, PC1, AC 240V: 1 kA |
| Short circuit capacity Icn | at In < 7 A/240 VAC : 8 x In |
| | at In ≥ 7 A/240 VAC : 200 A |
| | AC/DC 28 V : 400 A |
| Degree of Protection | from front side IP 40 acc. to IEC 60529 |
| Dielectric Strength | 50 Hz: > 1.5 kV<br>Impulse 1.2/50 µs: > 2.5 kV |
| Insulation resistance | 500 VDC > 100 MΩ |
| Endurance typical | 2 x Ir: 5000 switching cycles |
| Endurance minimum | Reset type<br>AC : 2 x Ir , cos φ 0.6 :<br>DC : 2 x Ir , L/R = 2 - 3 ms :<br>50 switching cycles |

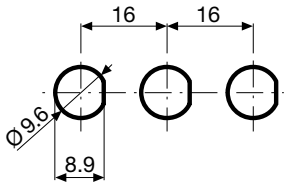
| | |
|---|---|
| Overload | IEC: min. 40 trips<br>@ 6 x Ir, cos φ 0.6 |
| | UL / CSA: min. 50 trips<br>@ 1.5 x Ir, cos φ 0.75 |
| Ambient temperature | -5 °C to 60 °C |
| Vibration Resistance | ± 1.5 mm @ 10 - 60 Hz<br>acc. to IEC 60068-2-6, test Fc<br>10 G @ 60 - 500 Hz<br>acc. to IEC 60068-2-6, test Fc |
| Shock Resistance | 100 G / 6 ms<br>acc. to IEC 60068-2-27, test Ea |
| Tripping Type | Thermal |
| Actuation type | Reset type |
| Weight | ca. 10 g |

**Dimension**
T12-211



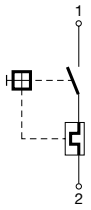

T12-211SN



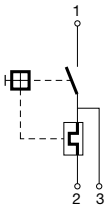



## Diagrams

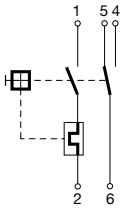
Tap 4,8 x 0,8 mm



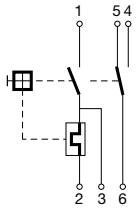

Tap 4,8 x 0,8 mm




Tap 4,8 x 0,8 mm




Tap 4,8 x 0,8 mm




## Approvals

| Approval | | Main circuit | | | Auxiliary circuit | | |
|---|---|---|---|---|---|---|---|
| | | Rated current | Rated voltage AC | Rated voltage DC | Rated current | Rated voltage AC | Rated voltage DC |
| c UL us | UL 1077<br>CSA C22.2 No. 235 | 0.05...15 A | 240 V | 28 V | 2 A<br>3 A | 120 V<br>- | -<br>28 V |
| SA | CSA C22.2 No. 235 | 0.3...16 A | 240 V | 28 V | 1 A | 240 V | - |
| VDE | IEC 60934 | 0.05...16 A | 240 V | 28 V | 1 A | 240 V | 28 V |
| CCC | GB 17701 | 0.05...16 A | 240 V | 28 V | 1 A | 240 V | 28 V |

### Typical internal resistance

| Rated Current [A] | Internal Resistance [Ω] |
|---|---|
| 0.05 | 225.000 |
| 0.50 | 3.300 |
| 1.00 | 0.880 |
| 2.00 | 0.267 |
| 3.00 | 0.128 |
| 4.00 | 0.073 |
| 5.00 | 0.040 |
| 6.00 | 0.031 |
| 7.00 | 0.018 |
| 8.00 | 0.018 |
| 9.00 | 0.010 |
| 10.00 | 0.0087 |
| 11.00 | 0.0087 |
| 12.00 | 0.0087 |
| 13.00 | 0.0087 |
| 14.00 | 0.0070 |
| 15.00 | 0.0070 |
| 16.00 | 0.0055 |

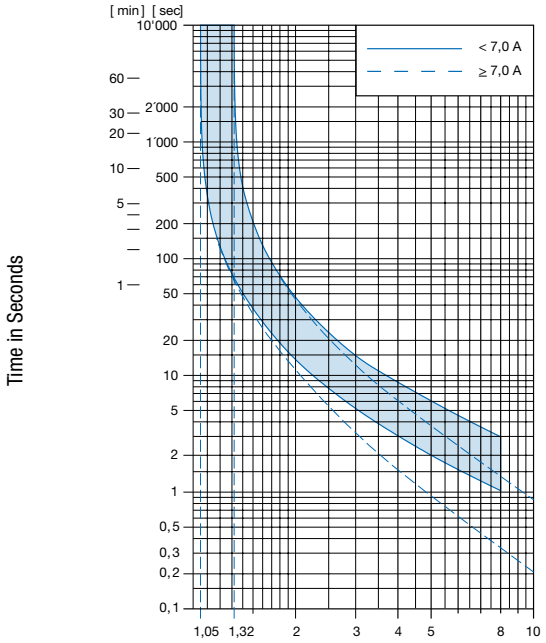
### Effect of ambient temperature

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 | 0.87 |
| 0 | 0.90 |
| 10 | 0.95 |
| 23 | 1.00 |
| 30 | 1.05 |
| 40 | 1.12 |
| 50 | 1.20 |
| 60 | 1.30 |

Example: Rated current = 5 A; Environmental temperature = 50 °C; --> Correction factor = 1.2; Resulting current = 6.0 A

## Time-Current-Curves




Reference Temperature +23°

## Config. Code

T12 - 1 2 3 A B C - 1.23

The characters are placeholders for the correspondingly keys of selections from the key tables.

### T12 - **1** 2 3 A B C - 1.23 = Mounting

| Mounting | Configuration key |
|---|---|
| Threaded neck type with hexagonal- and knurled nut | 2 |

### T12 - 1 **2** 3 A B C - 1.23 = Actuation type

| Actuation type | Configuration key |
|---|---|
| Reset type | 1 |

### T12 - 1 2 **3** A B C - 1.23 = Terminal

| Terminal | Configuration key |
|---|---|
| Quick connect terminal 6.3x0.8mm | 1 |

### T12 - 1 2 3 **A** B C - 1.23 = Auxiliary contact

| Auxiliary contact | Configuration key |
|---|---|
| Auxiliary contact | S |

### T12 - 1 2 3 A **B** C - 1.23 = Shunt terminal

| Shunt terminal | Configuration key |
|---|---|
| Shunt terminal | N |

### T12 - 1 2 3 A B **C** - 1.23 = Setting indication

| Setting indication | Configuration key |
|---|---|
| Setting indication | R |

### T12 - 1 2 3 A B C - **1.23** = Rated current

| Rated current | Configuration key |
|---|---|
| 0.05 A | 0.05 |
| 0.1 A | 0.1 |
| 0.15 A | 0.15 |
| 0.2 A | 0.2 |
| 0.3 A | 0.3 |
| 0.4 A | 0.4 |
| 0.5 A | 0.5 |
| 0.6 A | 0.6 |
| 0.7 A | 0.7 |
| 0.8 A | 0.8 |
| 0.9 A | 0.9 |
| 1.0 | 1 |
| 1.1 A | 1.1 |
| 1.2 A | 1.2 |
| 1.3 A | 1.3 |
| 1.4 A | 1.4 |

Other rated currents on request

| Rated current | Configuration key |
|---|---|
| 1.5 A | 1.5 |
| 1.6 A | 1.6 |
| 1.7 A | 1.7 |
| 1.8 A | 1.8 |
| 1.9 A | 1.9 |
| 2.0 A | 2 |
| 2.1 A | 2.1 |
| 2.3 A | 2.3 |
| 2.5 A | 2.5 |
| 2.8 A | 2.8 |
| 3.0 A | 3 |
| 3.3 A | 3.3 |
| 3.5 A | 3.5 |
| 4.0 A | 4 |
| 4.5 A | 4.5 |
| 5.0 A | 5 |

Other rated currents on request

| Rated current | Configuration key |
|---|---|
| 5.5 A | 5.5 |
| 6.0 | 6 |
| 6.5 A | 6.5 |
| 7.0 A | 7 |
| 7.5 A | 7.5 |
| 8.0 A | 8 |
| 8.5 A | 8.5 |
| 9.0 A | 9 |
| 9.5 A | 9.5 |
| 10.0 A | 10 |
| 11.0 A | 11 |
| 12.0 A | 12 |
| 13.0 A | 13 |
| 14.0 A | 14 |
| 15.0 A | 15 |
| 16.0 A | 16 |

Other rated currents on request

## Variants

| Rated current | Construction variants | | | Config. Code | Order Number |
|---|---|---|---|---|---|
| | Auxiliary contact | Shunt terminal | Setting indication | | |
| 12.0 A | | | | T12-211-12 | 4410.0019 |
| 0.8 A | ● | | | T12-211S-0.8 | 4410.0044 |
| 2.5 A | ● | | | T12-211S-2.5 | 4410.0046 |
| 10.0 A | | | | T12-211-10 | 4410.0106 |
| 6.5 A | ● | | | T12-211S-6.5 | 4410.0264 |
| 1.0 | ● | ● | ● | T12-211SNR-1 | 4410.0655 |

Most Popular.

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

## Packaging Unit

1 Pcs

## Accessories

| | Description |
|---|---|
|  | T-Linie Zubehör<br>Accessories to T-Line |

19.01.2015



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