

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



See below:

Approvals and Compliances

Description

- Threaded neck type
- Thermal circuit breaker
- 1-pole
- Reset type
- Quick connect terminals 6.3 x 0.8 mm

Unique Selling Proposition

- Compact design
- Positively trip-free release
- Available with cover
- Different mounting possibilities

Applications

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

Weblinks

[pdf datasheet](#), [html-datasheet](#), [General Product Information](#), [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 240 V: 1 kA |
| Short circuit capacity Icn | at $I_n < 7 \text{ A/240 VAC}$: 8 x I_n at $I_n \geq 7 \text{ A/240 VAC}$: 200 A AC/DC 28 V : 400 A |
| Degree of Protection | from front side IP 40 acc. to IEC 60529 |
| Dielectric Strength | 50Hz: > 1.5 kV Impulse 1.2/50 μs : > 2.5 kV |
| Insulation Resistance | 500 VDC > 100 M Ω |
| Endurance typical | 2 x I_r : 5000 switching cycles |
| Endurance minimum | Reset type AC : 2 x I_r , $\cos \phi$ 0.6 : DC : 2 x I_r , L/R = 2 - 3 ms : 50 switching cycles |

| | |
|----------------------|---|
| Overload | IEC: min. 40 trips @ 6 x I_r , $\cos \phi$ 0.6 UL / CSA: min. 50 trips @ 1.5 x I_r , $\cos \phi$ 0.75 |
| Ambient temperature | -5 °C to 60 °C |
| Vibration Resistance | $\pm 1.5 \text{ mm}$ @ 10 - 60 Hz acc. to IEC 60068-2-6, test Fc 10 G @ 60 - 500 Hz acc. to IEC 60068-2-6, test Fc |
| Shock Resistance | 100 G / 6ms acc. to IEC 60068-2-27, test Ea |
| Tripping Type | Thermal |
| Actuation Type | Reset type |
| Weight | ca. 10 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](#)

Approvals





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

Approval Reference Type: T12

| Approval Logo | Certificates | Certification Body | Description |
|---------------|-------------------------------|--------------------|--|
| | VDE Approvals | VDE | VDE Certificate Number: 99673 |
| | UL Approvals | UL | UL File Number: E71572 |
| | CQC Approvals | CQC | CCC Certificate Number: 2012010307564275 |

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 |
|--|--------------------------------|--------------|---|
|  | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. |

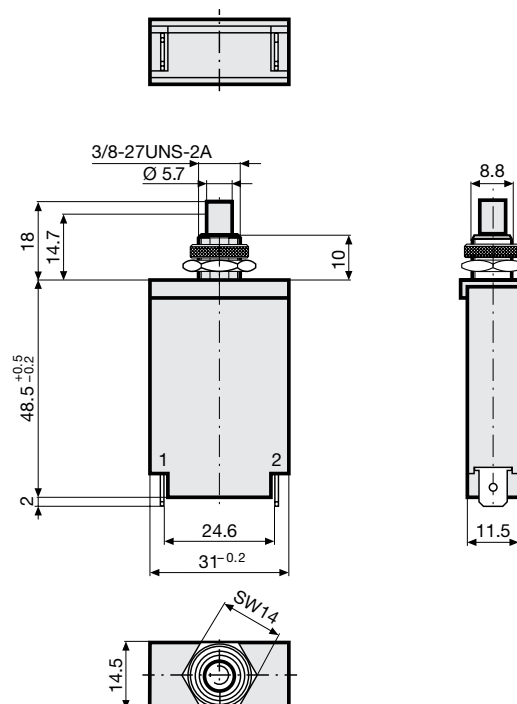
Compliances

The product complies with following Guide Lines

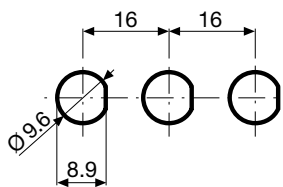
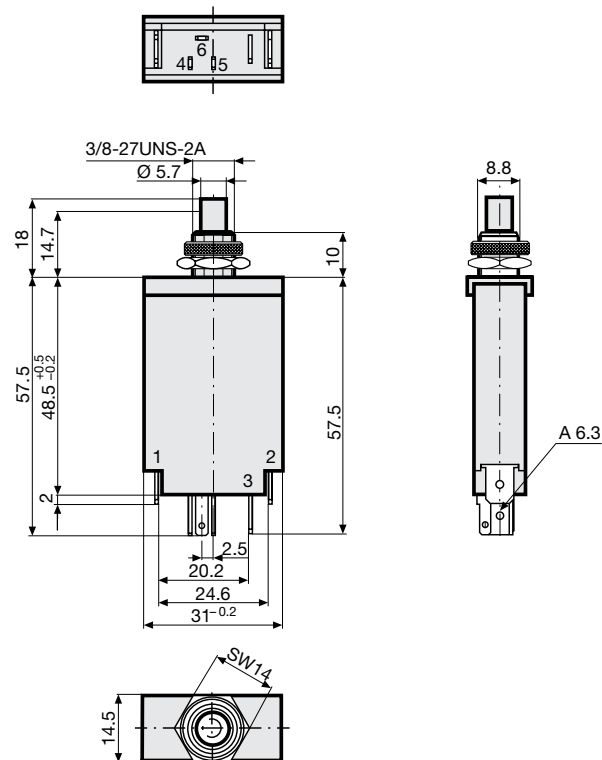
| Identification | Details | Initiator | Description |
|--|------------------------------|-------------|---|
|  | CE declaration of conformity | SCHURTER AG | The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008. |
|  | RoHS | SCHURTER AG | EU Directive RoHS 2011/65/EU |
|  | 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]

T12-211

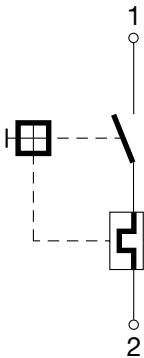


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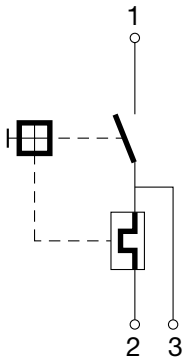


Diagrams

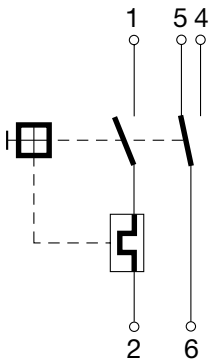
Tap 4,8 x 0,8 mm



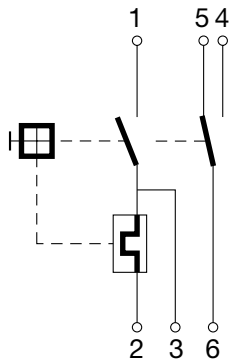
Tap 4,8 x 0,8 mm







Tap 4,8 x 0,8 mm



Tap 4,8 x 0,8 mm



| Approval | | Main circuit | | | Auxiliary circuit | | |
|--|-------------------|---------------|------------------|------------------|-------------------|------------------|------------------|
| | | Rated current | Rated voltage AC | Rated voltage DC | Rated current | Rated voltage AC | Rated voltage DC |
|  | UL 1077 | 0.05...15 A | 240 V | 28 V | 2 A | 120 V | - |
| | CSA C22.2 No. 235 | | | | 3 A | - | 28 V |
|  | CSA C22.2 No. 235 | 0.3...16 A | 240 V | 28 V | 1 A | 240 V | - |
|  | IEC 60934 | 0.05...16 A | 240 V | 28 V | 1 A | 240 V | 28 V |
|  | 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 |

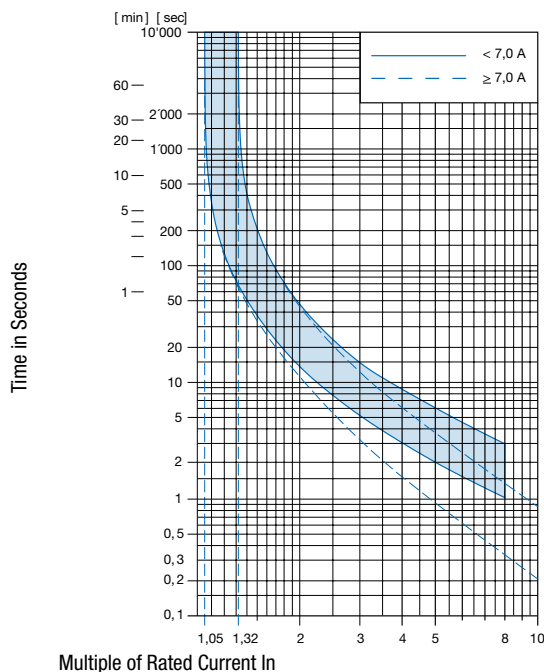
Effect of ambient temperature

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 | Rated current | Configuration key |
|---------------------------------|-------------------|---------------------------------|-------------------|
| 1.5 A | 1.5 | 5.5 A | 5.5 |
| 1.6 A | 1.6 | 6.0 | 6 |
| 1.7 A | 1.7 | 6.5 A | 6.5 |
| 1.8 A | 1.8 | 7.0 A | 7 |
| 1.9 A | 1.9 | 7.5 A | 7.5 |
| 2.0 A | 2 | 8.0 A | 8 |
| 2.1 A | 2.1 | 8.5 A | 8.5 |
| 2.3 A | 2.3 | 9.0 A | 9 |
| 2.5 A | 2.5 | 9.5 A | 9.5 |
| 2.8 A | 2.8 | 10.0 A | 10 |
| 3.0 A | 3 | 11.0 A | 11 |
| 3.3 A | 3.3 | 12.0 A | 12 |
| 3.5 A | 3.5 | 13.0 A | 13 |
| 4.0 A | 4 | 14.0 A | 14 |
| 4.5 A | 4.5 | 15.0 A | 15 |
| 5.0 A | 5 | 16.0 A | 16 |
| Other rated currents on request | | Other rated currents on request | |

Variants

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

Most Popular.

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

Packaging Unit 20 Pcs

Accessories

Description



T-Line Accessories
Accessories to T-Line