Circuit Breaker for Equipment thermal, Drop-in type, Reset type, Solder terminals



See below:

Approvals and Compliances

Description

- Drop-in type
- Thermal circuit breaker
- 1-pole
- Reset type
- Solder, THT

Unique Selling Proposition

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

Applications

- Power tools
- Household Equipment
- Power supplies and chargers
- Industrial 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 | 48 V |
| Rated current range AC | 0.05 - 12 A |
| Conditional short circuit capacity | IEC: Inc, PC1, AC 240 V: 2 kA |
| Short circuit capacity Icn | at In < 6.5 A/240 VAC : 8 x In |
| | at In ≥ 6.5 A/240 VAC : 96 A |
| Degree of Protection | from front side IP 40 acc. to IEC 60529 |
| Dielectric Strength | 50 Hz: > 1.5 kV |
| | Impulse 1.2/50 µs: > 2.5 kV |
| Insulation Resistance | $500 \text{VDC} > 100 \text{M}\Omega$ |
| Endurance typical | 2 x lr: 500 switching cycles |
| Endurance minimum | Reset type AC: $2 \times Ir$, $\cos \varphi$ 0.6: DC: $2 \times Ir$, $L/R = 2 - 3$ ms: 50 switching cycles |

| Overload | IEC: min. 40 trips |
|---------------------------|---------------------------------|
| | @ 6 x lr, cos φ 0.6 |
| | UL / CSA: min. 50 trips |
| | @ 1.5 x lr, cos φ 0.75 |
| Allowable Operation Temp. | -5°C to 60°C |
| Vibration Resistance | ± 1.5 mm @ 10 - 60 Hz |
| | acc. to IEC 60068-2-6, test Fc |
| | 5 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. 10g |

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: T11

| Approval Logo | Certificates | Certification Body | Description |
|------------------|---------------|--------------------|--|
| Ď ^V E | VDE Approvals | VDE | VDE Certificate Number: 99759 |
| c FU °us | UL Approvals | UL | UL File Number: E71572 |
| (W) | CQC Approvals | CQC | CCC Certificate Number: 2012010307564692 |

Product standards

Product standards that are referenced

| 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 |
| | Designed according to Designed according to Designed according to | Designed according to IEC 60934 Designed according to UL 1077 Designed according to CSA C22.2 No. 235 |

Application standards

Application standards where the product can be used

| Organization | Design | Standard | Description |
|--------------|--------------------------------|--------------|--|
| <u>IEC</u> | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. $\label{eq:continuous}$ |

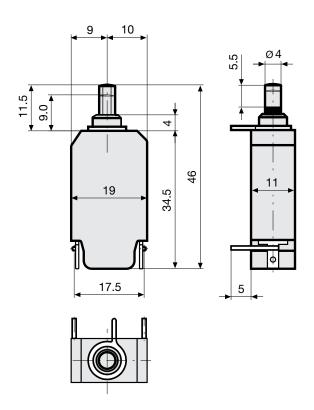
Compliances

The product complies with following Guide Lines

| | 3 | | |
|----------------|------------------------------|-------------|---|
| Identification | Details | Initiator | Description |
| C€ | 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 | RoHS | SCHURTER AG | EU Directive RoHS 2011/65/EU |
| (31) | 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 | 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. |

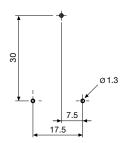
Dimension [mm]

T11-818



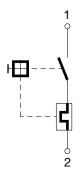
>7,5 A - 12 A on request

Drilling Diagrams

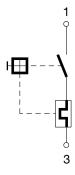


Diagrams

Rated current ≤7,5 A



Rated current >7,5 A



Typical internal resistance

| Typical internal resistance | | | | | |
|-----------------------------|----------------------------------|--|--|--|--|
| Rated Current [A] | Internal Resistance [Ω] | | | | |
| 0.05 | 380.000 | | | | |
| 0.50 | 5.200 | | | | |
| 1.00 | 1.350 | | | | |
| 2.00 | 0.300 | | | | |
| 3.00 | 0.130 | | | | |
| 4.00 | 0.080 | | | | |
| 5.00 | 0.040 | | | | |
| 6.00 | 0.040 | | | | |
| 7.00 | 0.020 | | | | |
| 8.00 | 0.012 | | | | |
| 9.00 | 0.012 | | | | |
| 10.00 | 0.011 | | | | |
| 11.00 | 0.0095 | | | | |
| 12.00 | 0.0095 | | | | |
| 13.00 | 0.0085 | | | | |
| 14.00 | 0.0085 | | | | |
| 15.00 | 0.0075 | | | | |
| 16.00 | 0.0075 | | | | |

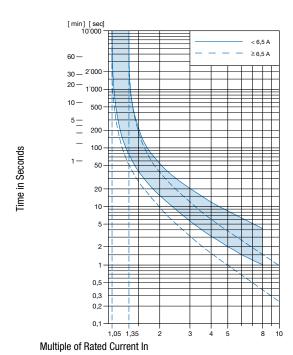
Effect of ambient temperature

The units are calibrated for an ambient temperature of $+23^{\circ}$ 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 | 1.04 |
| +40 | 1.10 |
| +50 | 1.15 |
| +60 | 1.20 |

Example: Rated current = 5 A, Environmental temperature = $40 \, ^{\circ}\text{C}$, --> Correction factor = 1.1, Resulting current = $5.5 \, \text{A}$ --> Fount to next higher rated current: $6 \, \text{A}$

Time-Current-Curves

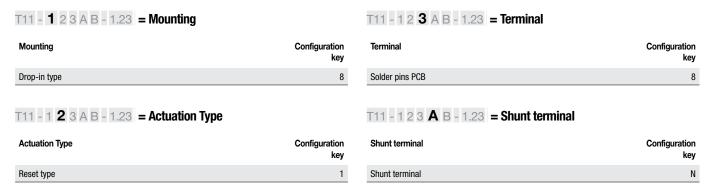


Reference Temperature +23°

Config. Code

T11 - 1 2 3 A B - 1.23

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



| T11 - 1 2 3 A B - 1.23 = Setting indication | |
|---|-------------------|
| Setting indication | Configuration key |
| Setting indication | R |

| T11 | - 1 | 2 | 3 | Α | В | - • | 1.23 | = F | 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 |
| 1.5 A | 1.5 |
| 1.6 A | 1.6 |
| 1.7 A | 1.7 |

Other rated currents on request

| Rated current | Configuration key |
|---------------|-------------------|
| 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 |
| 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 |

Other rated currents on request

Variants

| Rated current | Construction variants | | Config. Code | Order Number |
|---------------|-----------------------|--------------------|--------------|--------------|
| | Shunt terminal | Setting indication | | |
| 3.0 A | | | T11-818-3 | 4400.0215 |
| 5.0 A | | | T11-818-5 | 4400.0378 |
| 7.5 A | | | T11-818-7.5 | 4400.0779 |
| 0.3 A | • | | T11-818N-0.3 | 4400.0785 |
| 2.5 A | | | T11-818-2.5 | 4400.0831 |

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

Packaging Unit

100 Pcs

Accessories

Description



T-Line Accessories Accessories to T-Line