

Circuit Breaker for Equipment thermal vertical, THT terminals for PCB mounting, 1 pole



Description

- Thermal circuit breaker
- 1-pole
- On request available with elevated glow-wire ratings
- THT connectors

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

- Designed for standard and medical applications
- Power supplies
- Uninterruptible power supply
- Power tools
- Industrial appliances
- HVAC
- Household appliances

Weblinks

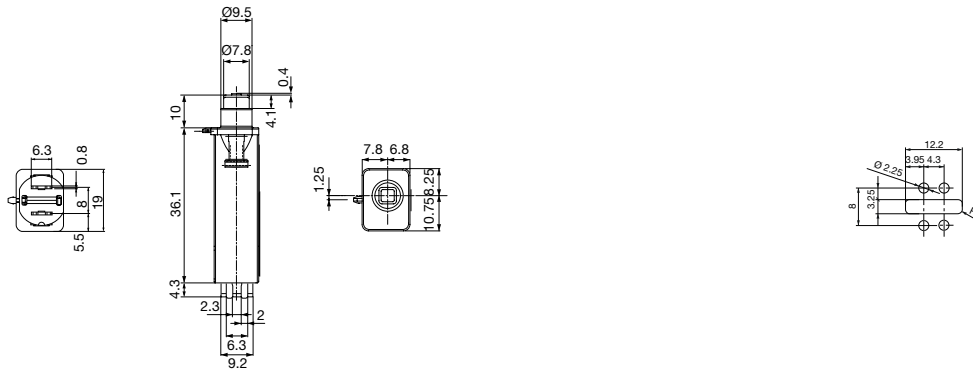
[pdf datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#), [Video](#)

Technical Data

Rated Voltage AC	240 V, 50 / 60 Hz
Rated Voltage DC	48 V
Rated current	4-12 A
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 _r , cos φ 0.6: min. 50 switching cycles
Endurance typical	4-8 A: 150% I _r , cos φ 0.9: 2500 switching cycles 10-12 A: 150% I _r , cos φ 0.9: 6000 switching cycles
Dielectric Strength	1500 VAC
Insulation Resistance	500 VDC > 1000 MΩ

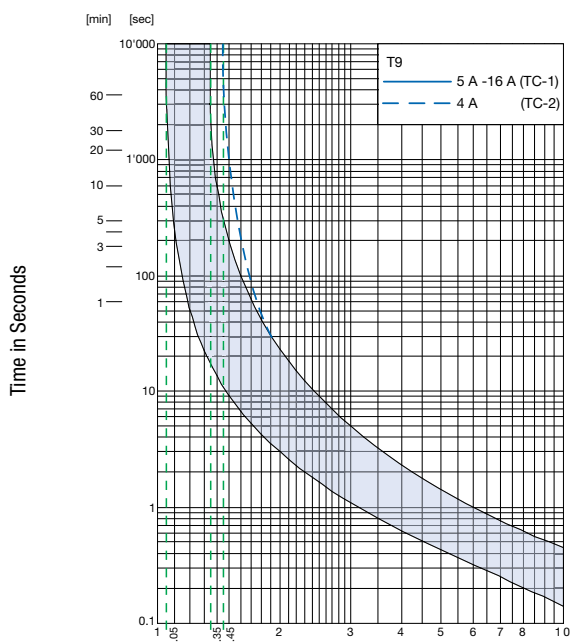
Ambient temperature	5-12 A: -5 °C to 60 °C 4 A: -5°C to 50 °C
Soldering Methods	Wave
Solderability	245 °C / 3 sec acc. to IEC 60068-2-20 / Test Ta, method 1
Resistance to Soldering Heat	260 °C / 10 sec acc. to IEC 60068-2-20 / Test Tb, method 1A
Weight	approx. 12.5 g

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



Rated Current [A]	Internal Resistance [$m\Omega$]
4	26.3
5	24.1
6	19.0
7	18.0
8	14.8
10	13.0
12	12.7

Time-Current-Curves



Multiple of Rated Current I_n

Reference Temperature $+23^\circ$

Effect of ambient temperature

The units are calibrated for an ambient temperature of $+23^\circ\text{C}$. To determine the rated current for a lower or higher ambient temperature, use a correction factor (typical value) from the table below:

Ambient temperature $[\text{°C}]$	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

Variants

connection type	Rated current	Order Number
Solder, THT	4A	3-101-228
Solder, THT	5A	3-101-227
Solder, THT	6A	3-101-226
Solder, THT	7A	3-101-232
Solder, THT	8A	3-101-231
Solder, THT	10A	3-101-230
Solder, THT	12A	3-101-229

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

Packaging Unit 100 Pcs