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



See below:

Approvals and Compliances

Description

- Thermal circuit breaker
- On request available with elevaled glow-wire ratings
- THT connectors

Unique Selling Proposition

- Reset type
- Cycling trip-free release
- Compact design
- Different mounting possibilities

Applications

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

Weblinks

pdf data sheet, html datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product, Product News, Video

Technical Data

240
48
4-12 A
IEC 60934: PC1, AC 240 V: 2 kA
UL / CSA: SC, AC 240 V DC 48 / 32 V:
2 kA, C1
IP40
IEC: 200% Ir, cos φ 0.6: min. 50 swit-
ching cycles
4-8 A: 150% lr, cos φ 0.9:
2500 switching cycles
10-12 A: 150% lr, cos φ 0.9:
6000 switching cycles
1500 VAC
500 VDC > 1000 MΩ

Allowable Operation Temp.	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

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

SCHURTER products are designed for use in industrial environments. They have approvals from independent testing bodies according to national and international standards. Products with specific characteristics and requirements such as required in the automotive sector according to IATF 16949, medical technology according to ISO 13485 or in the aerospace industry can be offered exclusively with customer-specific, individual agreements by SCHURTER.

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products. Approval Reference Type: T9

Approval Logo	Certificates	Certification Body	Description
Ø ^V E	VDE Approvals	VDE	VDE Certificate Number: 40038016
c FL °us	UL Approvals	UL	UR File Number: E71572
(1)	CCC Approvals	CCC	CCC Certificate Number: 2020970307003348

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
<u>IEC</u>	Designed according to	IEC 60934	Circuit-breakers for equipment (CBE)
(h)	Designed according to	UL 1077	Standard for Supplementary Protectors for Use in Electrical Equipment
CSA Group	Designed according to	CSA C22.2 No. 235	Supplementary Protectors
(11)	Designed according to	GB 17701	Circuit-breaker for equipment

Application standards

Application standards where the product can be used

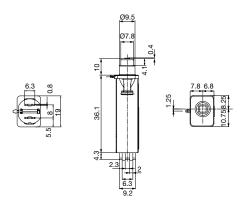
Organization	Design	Standard	Description
<u>IEC</u>	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

Compliances

The product complies with following Guide Lines

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.
UK CA	UKCA declaration of conformity	SCHURTER AG	The UKCA marking declares that the product complies with the applicable requirements laid down in the British Amendment of Regulation (EC) 765/2008.
RoHS	RoHS	SCHURTER AG	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
©	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.

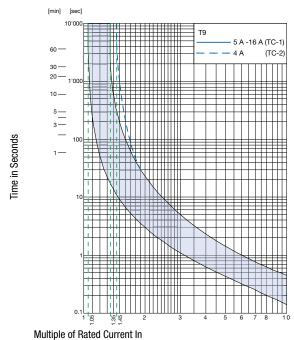
Dimension [mm]





Approval	UL 1077	Rated current 4 - 12 A	Rated Voltage AC 240 V	Rated Voltage DC 48 V
c FL °us	CSA 22.2 235	4 - 12 A	240 V	48 V
D ^V E	IEC 60934	4 - 12 A	240 V	48 V
<u></u>	GB 17701	4 - 12 A	240 V	48 V

Time-Current-Curves



Ambient 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 = 10 A, Environmental temperature = 60 °C, --> Correction factor = 1.21, Resulting current = 12.1 A --> Round to next higher rated current: 13 A

All Variants

Config. Code	Designation	Order Number
T90	T9, Circuit Breakers, , , , , ,	3-101-226
T90	T9, Circuit Breakers, , , , , ,	3-101-227
T90	T9, Circuit Breakers, , , , , ,	3-101-228
T90	T9, Circuit Breakers, , , , , ,	3-101-229
T90	T9, Circuit Breakers, , , , , ,	3-101-230
T90	T9, Circuit Breakers, , , , , ,	3-101-231
T90	T9, Circuit Breakers, , , , , ,	3-101-232

The listed variants should be available from stock. Other versions on request www.schurter.com/contact

100 Pcs

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

Packaging Unit

Circuit Breakers