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



Description

- Threaded neck type
- Thermal circuit breaker
- 1-pole
- Reset type
- Wide current range
- High breaking capacity
- Quick connect terminals 6.3 x 0.8 mm
- Versions with a rated current > 20A are delivered with screw clamp terminals.

Unique Selling Proposition

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

See below: **Approvals and Compliances**

Applications

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

Weblinks

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

Rated Voltage AC	AC 240/277 VAC, see approbations	Overload	IEC: min. 40 trips
Rated Voltage DC	28 VDC		@ 6 x lr, cos φ 0.6
Rated current range AC	0.05 - 30 A		UL / CSA: min. 50 trips
Conditional short circuit capa-	IEC 60934: PC1, AC 240 V: 1 kA		@ 1.5 x lr, cos φ 0.75
city Inc		Allowable Operation Temp.	-5°C to 60°C
Short circuit capacity Icn	IEC 60934: at ln < 7 A/240 VAC : 8 x ln	Vibration Resistance	± 1.5 mm @ 10 - 60 Hz
	IEC 60934: at In ≥ 7 A/240 VAC : 400 A		acc. to IEC 60068-2-6, test Fc
	AC/DC 28 V : 400 A		10 G @ 60 - 500 Hz
Degree of Protection	front side IP40 acc. to IEC 60529		acc. to IEC 60068-2-6, test Fc
Dielectric Strength	50Hz: 1.5kV	Shock Resistance	100 G / 6ms
	Impulse 1.2/50 µs: > 2.5 kV		acc. to IEC 60068-2-27, test Ea
Insulation Resistance	$500 \text{VDC} > 100 \text{M}\Omega$	Tripping Type	Thermal
Endurance typical	2 x lr: 3000 switching cycles	Actuation Type	Reset type
Endurance minimum	Reset type	Weight	ca. 10g
	AC : $2 \times 1r$, cos ϕ 0.6 :		
	DC : 2 x lr , L/R = 2 - 3 ms :		
	50 switching cycles		

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.

T13-211

Approvals

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products. Approval Reference Type: T13

Approval Logo	Certificates	Certification Body	Description
₽ ¥E	VDE Approvals	VDE	VDE Certificate Number: 123283
AL °	UL Approvals	UL	UR File Number: E71572
() D	CSA Approvals	CSA	CSA Certification Record: LR 37712
	CCC Approvals	CCC	CCC Certificate Number: 2020970307003503

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
IEC	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
(m)	Designed according to	GB 17701	Circuit-breaker for equipment

Application standards

Application standards where the product can be used

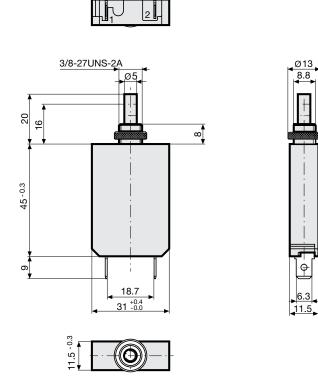
Organization	Design	Standard	Description
IEC.	Suitable for applications acc.	IEC/UL 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements

Compliances

The product complies with following Guide Lines

Identification	Details	Initiator	Description
CE	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
5 0	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.

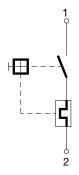
Dimension [mm] T13-211





Diagrams

T13-...



T13-211

Approval		Rated current	Rated Voltage AC	Rated Voltage DC
FL ®	UL 1077	0.0530 A	277 V	28 V
SP:	CSA C22.2 No. 235	0.0530 A	277 V	28 V
	EN 60934	0.0530 A	240 V	-
	GB 17701	0.0530 A	240 V	-

Typical internal resistance per pole

Rated Current [A]	Internal Resistance [Ω]
0.05	376.500
0.50	4.40
1.00	1.10
2.00	0.31
3.00	0.14
4.00	0.068
5.00	0.048
6.00	0.033
8.00	0.026
9.00	0.0125
10.00	0.0125
11.00	0.0085
12.00	0.0085
13.00	0.0085
14.00	0.007
15.00	0.007
16.00	0.007
17.00	0.0047
18.00	0.0047
19.00	0.0047
20.00	0.004
21.00	0.0035
22.00	0.003
23.00	0.003
24.00	0.003
25.00	0.003
26.00	0.0022
27.00	0.002
28.00	0.002
29.00	0.002
30.00	0.002

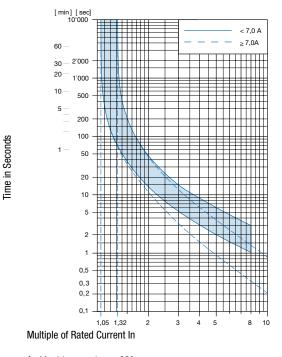
Effect of ambient temperature

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	0.88
0	0.90
10	0.95
23	1.00
30	1.05
40	1.10
50	1.18
60	1.26

Example: Rated current = 5 A, Environmental temperature = 40 °C, --> Correction factor = 1.1, Resulting current = 5.5 A --> Round to next higher rated current: 6 A

Time-Current-Curves



Ambient temperature +23°

Config. Code

T13 - 1 2 3 B - 1.23

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

T13 - 1 2 3 B - 1.23 = Mounting		Terminal	Configuration key
Mounting	Configuration key	Quick connect terminal 6.3x0.8mm	1
Threaded neck type with knurled nut	2	T13 - 1 2 3 B - 1.23 = Setting indication	
T13 - 1 2 3 B - 1.23 = Actuation Type		Setting indication	Configuration key
Actuation Type	Configuration key	Setting indication	R
Reset type	1	T13 - 1 2 3 B - 1.23 = Rated current	

T13 - 1 2 3 B - 1.23 = Terminal

Rated current	Configuration key	Rated current	Configuration key
0.05 A	0.05	3.5 A	3.5
0.1 A	0.1	4.0 A	4
0.15 A	0.15	4.5 A	4.5
0.2 A	0.2	5.0 A	5
0.3 A	0.3	5.5 A	5.5
0.4 A	0.4	6.0	6
0.5 A	0.5	6.5 A	6.5
0.6 A	0.6	7.0 A	7
0.7 A	0.7	7.5 A	7.5
0.8 A	0.8	8.0 A	8
0.9 A	0.9	8.5 A	8.5
1.0	1	9.0 A	9
1.1 A	1.1	9.5 A	9.5
1.2 A	1.2	10.0 A	10
1.3 A	1.3	11.0 A	11
1.4 A	1.4	12.0 A	12
1.5 A	1.5	13.0 A	13
1.6 A	1.6	14.0 A	14
1.7 A	1.7	15.0 A	15
1.8 A	1.8	16.0 A	16
1.9 A	1.9	17.0 A	17
2.0 A	2	18.0 A	18
2.1 A	2.1	19.0 A	19
2.3 A	2.3	20.0 A	20
2.5 A	2.5	22.0 A	22
2.8 A	2.8	25.0 A	25
3.0 A	3	28.0 A	28
3.3 A	3.3	30.0 A	30
Other rated currents on request		Other rated currents on request	

Variants

Rated current	Setting indication	Config. Code	Order Number	
15.0 A		T13-211-15	4411.0007	
20.0 A		T13-211-20	4411.0010	
30.0 A		T13-211-30	4411.0017	
18.0 A		T13-211-18	4411.0019	
25.0 A		T13-211-25	4411.0073	
30.0 A	•	T13-211R-30	4411.0221	

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

The specifications, descriptions and illustrations indicated in this document are based on current information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each product selected for their own applications.