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
- 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

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

References

Weblinks

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

Technical Data

Rated Voltage AC	AC 240/277 VAC, see approbations
Rated Voltage DC	28 VDC
Rated current range AC	0.05 - 30 A
Conditional short circuit capa-	IEC 60934: PC1, AC 240 V: 1 kA
city Inc	
Short circuit capacity Icn	IEC 60934: at ln < 7 A/240 VAC : 8 x ln
	IEC 60934: at In ≥ 7 A/240 VAC : 400 A
	AC/DC 28 V : 400 A
Degree of Protection	front side IP40 acc. to IEC 60529
Dielectric Strength	50Hz: 1.5kV
	Impulse 1.2/50 µs: > 2.5 kV
Insulation Resistance	$500\text{VDC} > 100\text{M}\Omega$
Endurance typical	2 x Ir: 3000 switching cycles
Endurance minimum	Reset type
	AC: 2 x lr, cos φ 0.6:
	DC: 2 x lr, 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
	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. 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

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: T13

Approval Logo	Certificates	Certification Body	Description
_D ^V E	VDE Approvals	VDE	VDE Certificate Number: 123283
A	UL Approvals	UL	UR File Number: E71572
 ®	CSA Approvals	CSA	CSA Certification Record: LR 37712
(W)	CCC Approvals	ccc	CCC Certificate Number: 2020970307003503

Product standards

Product standards that are referenced

Organization	Design	Standard	Description
<u>IEC</u>	Designed according to	IEC 60934	Circuit-breakers for equipment (CBE)
(UL)	Designed according to	UL 1077	Standard for Supplementary Protectors for Use in Electrical Equipment
GF Group	Designed according to	CSA C22.2 No. 235	Supplementary Protectors
(3)	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

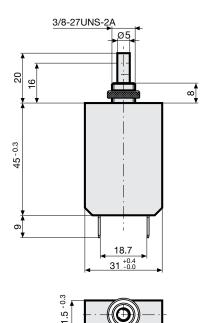
The product complies with following Guide Lines

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
50	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



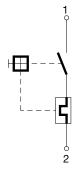






Diagrams

T13-...



Approval		Rated current	Rated Voltage AC	Rated Voltage DC
A1 °	UL 1077	0.0530 A	277 V	28 V
(F)	CSA C22.2 No. 235	0.0530 A	277 V	28 V
₽VE	EN 60934	0.0530 A	240 V	-
<u></u>	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 0.003 22.00 0.003 23.00 0.003 24.00 0.003 25.00 0.003 26.00 0.002 29.00 0.002 29.00 0.002	iypicai internai resis	tance per pole
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 17.00 0.0047 18.00 0.0047 19.00 0.0047 20.00 0.004 21.00 0.003 22.00 0.003 23.00 0.003 25.00 0.003 25.00 0.003 25.00 0.003 26.00 0.002 27.00 0.002 28.00 0.002	Rated Current [A]	Internal Resistance [Ω]
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 0.007 15.00 0.007 15.00 0.007 17.00 0.0047 19.00 0.0047 20.00 0.004 21.00 0.003 22.00 0.003 23.00 0.003 24.00 0.003 25.00 0.003 26.00 0.002 27.00 0.002 28.00 0.002	0.05	376.500
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 19.00 0.0047 20.00 0.004 21.00 0.003 22.00 0.003 23.00 0.003 24.00 0.003 25.00 0.003 26.00 0.002 27.00 0.002 28.00 0.002	0.50	4.40
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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	21.00	0.0035
24.00 0.003 25.00 0.003 26.00 0.0022 27.00 0.002 28.00 0.002 29.00 0.002	22.00	0.003
25.00 0.003 26.00 0.0022 27.00 0.002 28.00 0.002 29.00 0.002	23.00	0.003
26.00 0.0022 27.00 0.002 28.00 0.002 29.00 0.002	24.00	0.003
27.00 0.002 28.00 0.002 29.00 0.002	25.00	0.003
28.00 0.002 29.00 0.002	26.00	0.0022
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	28.00	0.002
30.00 0.002	29.00	0.002
	30.00	0.002

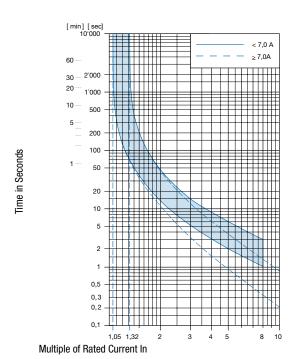
Effect of ambient temperature

The units are calibrated for an ambient temperature of $\pm 23^{\circ}$ 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 = $40 \,^{\circ}\text{C}$, --> Correction factor = 1.1, Resulting current = $5.5 \,^{\circ}\text{A}$ --> Round to next higher rated current: $6 \,^{\circ}\text{A}$

Time-Current-Curves

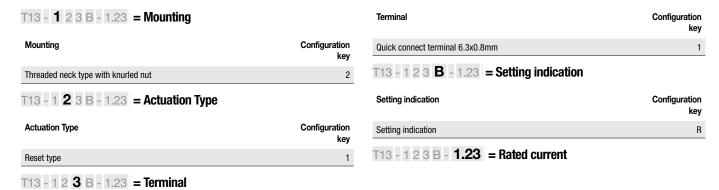


Ambient temperature +23°

Config. Code

T13 - 1 2 3 B - 1.23

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



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

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/info-center/ support-tools/stock-check-distributors

20 Pcs

Packaging Unit

Accessories

Description



T-Line_Accessories
Accessories to T-Line