

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







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

## **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

#### Weblinks

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

#### **Technical Data**

Rated Voltage AC	240/277 V: 50/60 Hz, see approbations
Rated Voltage DC	28 V
Rated current range AC	0.05 - 30 A
Conditional short circuit ca-	IEC: Inc, PC1, AC 240 V: 1 kA
pacity	
Short circuit capacity Icn	at ln < 7 A/240 VAC : 8 x ln
	at In ≥ 7 A/240 VAC : 400 A
	AC/DC 28 V : 400 A
Degree of Protection	from front side IP 40 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: $2 \times Ir$ , $L/R = 2 - 3 \text{ ms}$ :
	50 switching cycles

IEC: min. 40 trips		
@ 6 x lr, cos φ 0.6		
UL / CSA: min. 50 trips		
@ 1.5 x lr, cos φ 0.75		
-5°C to 60°C		
± 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		
100 G / 6ms		
acc. to IEC 60068-2-27, test Ea		
Thermal		
Reset type		
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: T13

Approval Logo	Certificates	Certification Body	Description
_DVE	VDE Approvals	VDE	VDE Certificate Number: 123283
<b>%</b>	UL Approvals	UL	UL File Number: E71572
<b>(</b>	CSA Approvals	CSA	CSA Certification Record: LR 37712
(M)	CQC Approvals	CQC	CCC Certificate Number: 2012010307571195

# **Product standards**

Product standards that are referenced

Organization	Design	Standard	Description
<u>IEC</u>	Designed according to	IEC 60934	Circuit-breakers for equipment (CBE)
(ŲL)	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
<b>(%)</b>	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>	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

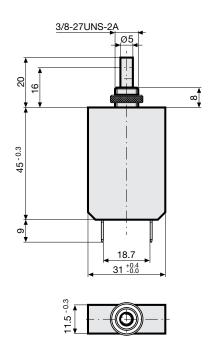
The product complies with following Guide Lines

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
<b>5</b>	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



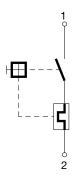






# **Diagrams**

T13-...



Approval		Rated current	Rated Voltage AC	Rated Voltage DC
<b>A</b> 1°	UL 1077	0.0530 A	277 V	28 V
<b>(P</b>	CSA C22.2 No. 235	0.0530 A	277 V	28 V
<b>D</b> VE	EN 60934	0.0530 A	240 V	-
(*)	GB 17701	0.0530 A	240 V	-

#### Typical internal resistance

rypicai internai resistance			
Rated Current [A]	Internal Resistance [ $\Omega$ ]		
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		

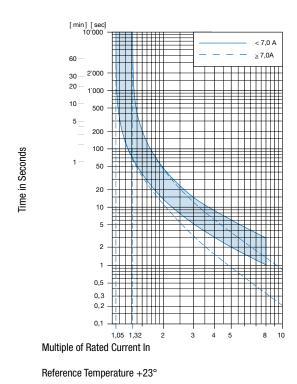
#### Effect of ambient temperature

The units are calibrated for an ambient temperature of +23°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 --> Fount to next higher rated current: 6 A

### **Time-Current-Curves**



# Config. Code

# T13 - 1 2 3 B - 1.23

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

T13 - <b>1</b> 2 3 B - 1.23 <b>= Mounting</b>	
Mounting	Configuration key
Threaded neck type with knurled nut	2
T13 - 1 <b>2</b> 3 B - 1.23 <b>= Actuation Type</b>	
Actuation Type	Configuration key
Reset type	1
T13 - 1 2 <b>3</b> B - 1.23 = <b>Terminal</b> Terminal	Configuration key
Quick connect terminal 6.3x0.8mm	1
T13 - 1 2 3 <b>B</b> - 1.23 <b>= Setting indication</b>	
Setting indication	Configuration key
Setting indication	R
T13 - 1 2 3 B - <b>1.23</b> = 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
1.8 A	1.8
1.9 A	1.9
2.0 A	2
2.1 A	2.1
2.3 A	2.3

Other rated currents on request

Rated current	Configuration key	Rated current	Configuration key
2.5 A	2.5	9.5 A	9.5
2.8 A	2.8	10.0 A	10
3.0 A	3	11.0 A	11
3.3 A	3.3	12.0 A	12
3.5 A	3.5	13.0 A	13
4.0 A	4	14.0 A	14
4.5 A	4.5	15.0 A	15
5.0 A	5	16.0 A	16
5.5 A	5.5	17.0 A	17
6.0	6	18.0 A	18
6.5 A	6.5	19.0 A	19
7.0 A	7	20.0 A	20
7.5 A	7.5	22.0 A	22
8.0 A	8	25.0 A	25
8.5 A	8.5	28.0 A	28
9.0 A	9	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.

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Packaging Unit 20 Pcs

#### **Accessories**

Description



T-Line Accessories Accessories to T-Line