Circuit Breaker for Equipment thermal, Drop-in type, Reset type, Solder terminals



#### See below:

### **Approvals and Compliances**

### **Description**

- Drop-in type
- Thermal circuit breaker
- 1-pole
- Reset type
- Solder, THT

### **Unique Selling Proposition**

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

### **Applications**

- Power tools
- Household Equipment
- Power supplies and chargers
- Industrial appliances

#### 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 VAC
Rated Voltage DC	48 VDC
Rated current range AC	0.05 - 12 A
Conditional short circuit capacity Inc	IEC 60934: PC1, AC 240 V: 2 kA
Short circuit capacity Icn	IEC 60934: at In < 6.5 A/240 VAC : 8 x In
	IEC 60934: at ln ≥ 6.5 A/240 VAC : 96 A
Degree of Protection	from front side IP40 acc. to IEC 60529
Dielectric Strength	50 Hz: > 1.5 kV
	Impulse 1.2/50 µs: > 2.5 kV
Insulation Resistance	$500\text{VDC} > 100\text{M}\Omega$
Endurance typical	2 x Ir: 500 switching cycles
Endurance minimum	Reset type AC: $2 \times Ir$ , $\cos \varphi$ 0.6: DC: $2 \times Ir$ , $L/R = 2 - 3 \text{ ms}$ : 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
	5 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. 10 q

### **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: T11

VDE Approvals  VDE VDE Certificate Number: 99759	Approval Logo	Certificates	Certification Body	Description
	_DVE	VDE Approvals	VDE	VDE Certificate Number: 99759
C THE NUMBER. E71372	c <b>FL</b> °us	UL Approvals	UL	UL File Number: E71572
CCC Approvals CCC Ccc Cccc Ccc Cccc Cccc Cccc Cccc	<b>(W)</b>	CCC Approvals	CCC	CCC Certificate Number: 2012010307564692

#### **Product standards**

Product standards that are referenced

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

### **Application standards**

Application standards where the product can be used

Organization	Design	Standard	Description
<u>IEC</u>	Designed for applications acc.	IEC/UL 62368-1	IEC 62368-1 includes the basic requirements for safety of audio, video, information technology and office equipment.

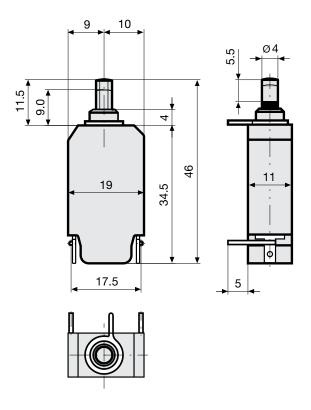
### Compliances

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	Directive RoHS 2011/65/EU, Amendment (EU) 2015/863
<b>50</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.

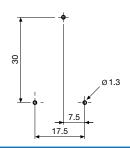
# Dimension [mm]

T11-818



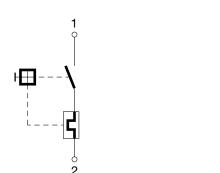
>7,5 A - 12 A on request

# **Drilling Diagrams**

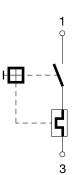


## **Diagrams**

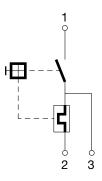
Rated current ≤7,5 A



Rated current >7,5 A



Shunt terminal T11-...N ≤6,5 A



## Typical internal resistance per pole

Rated Current [A]	Internal Resistance [ $\Omega$ ]
0.05	380.000
0.50	5.200
1.00	1.350
2.00	0.300
3.00	0.130
4.00	0.080
5.00	0.040
6.00	0.040
7.00	0.020
8.00	0.012
9.00	0.012
10.00	0.011
11.00	0.0095
12.00	0.0095
13.00	0.0085
14.00	0.0085
15.00	0.0075
16.00	0.0075

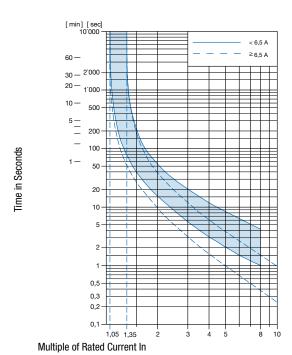
#### Effect of ambient temperature

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	0.87
0	0.90
+10	0.95
+23	1.00
+30	1.04
+40	1.10
+50	1.15
+60	1.20

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**

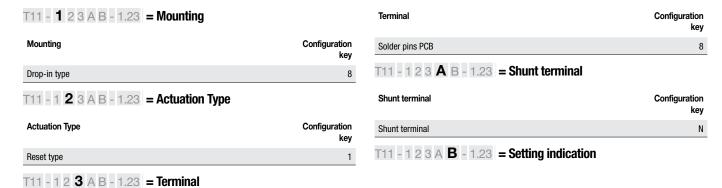


Reference Temperature +23°

### Config. Code

### T11 - 1 2 3 A B - 1.23

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



Setting indication	Configuration key	Rated current	Configuration key
Setting indication	R	1.9 A	1.9
T11 - 1 2 3 A B - <b>1.23 = Rated current</b>		2.0 A	2
1111 - 12 3 A B - 1.20 — Nateu Current		2.1 A	2.1
Rated current	Configuration	2.3 A	2.3
	key	2.5 A	2.5
0.05 A	0.05	2.8 A	2.8
0.1 A	0.1	3.0 A	3
0.15 A	0.15	3.3 A	3.3
0.2 A	0.2	3.5 A	3.5
0.3 A	0.3	4.0 A	4
0.4 A	0.4	4.5 A	4.5
0.5 A	0.5	5.0 A	5
0.6 A	0.6	5.5 A	5.5
0.7 A	0.7	6.0	6
0.8 A	0.8	6.5 A	6.5
0.9 A	0.9	7.0 A	7
1.0	1	7.5 A	7.5
1.1 A	1.1	8.0 A	8
1.2 A	1.2	8.5 A	8.5
1.3 A	1.3	9.0 A	9
1.4 A	1.4	9.5 A	9.5
1.5 A	1.5	10.0 A	10
1.6 A	1.6	11.0 A	11
1.7 A	1.7	12.0 A	12
1.8 A	1.8	Other rated currents on request	

### **Variants**

Rated current	Construction variants		Config. Code	Order Number
	Shunt terminal Setting indication			
3.0 A			T11-818-3	4400.0215
5.0 A			T11-818-5	4400.0378
7.5 A			T11-818-7.5	4400.0779
0.3 A	•		T11-818N-0.3	4400.0785
2.5 A			T11-818-2.5	4400.0831

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

Circuit Breakers

**Packaging Unit** 100 Pcs

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

# Schurter:

4400.0082	4400.0132	4400.0148	4400.0161	4400.0184	4400.0189	4400.0215	4400.0305	4400.0412	4400.0415
4400.0416	4400.0593	4400.0656	4400.0715	4400.0716	4400.0747	4400.0775	4400.0185	4400.0779	4400.0503