

Circuit Breaker for Equipment thermal, Threaded neck type, Manual ON/OFF, Quick connect terminals



Description

- Threaded neck type
- Thermal circuit breaker
- 1-pole
- Manual ON/OFF type
- Quick connect terminals 6.3 x 0.8 mm

Unique Selling Proposition

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

Standards

- IEC 60934
- UL 1077
- CSA C22.2 No. 235
- GB 17701

Applications

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

Weblinks

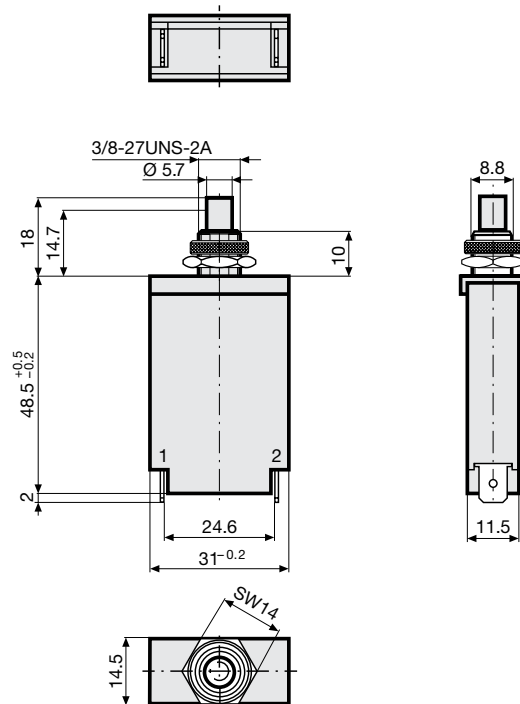
[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#)

Technical Data

Rated Voltage AC	240 V; 50/60 Hz
Rated Voltage DC	28 V
Rated current range AC	0.05 - 15/16 A , see approbations
Conditional short circuit capacity	IEC: Inc, PC1, AC 240 V: 1 kA
Short circuit capacity Icn	at $I_n < 7 \text{ A/240 VAC}$: 8 x I_n at $I_n \geq 7 \text{ A/240 VAC}$: 200 A AC/DC 28 V : 400 A
Degree of Protection	from front side IP 40 acc. to IEC 60529
Dielectric Strength	50Hz: > 1.5 kV Impulse 1.2/50 μs : > 2.5 kV
Insulation resistance	500 VDC > 100 M Ω
Endurance typical	2 x I_r : 5000 switching cycles
Endurance minimum	Manual ON/OFF type AC : 2 x I_r , $\cos \phi$ 0.6 : DC : 2 x I_r , L/R = 2 - 3 ms : 5000 switching cycles

Overload	IEC: min. 40 trips @ 6 x I_r , $\cos \phi$ 0.6 UL / CSA: min. 50 trips @ 1.5 x I_r , $\cos \phi$ 0.75
Ambient temperature	-5 °C to 60 °C
Vibration Resistance	$\pm 1.5 \text{ mm}$ @ 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	Manual ON/OFF
Weight	ca. 10 g

T12-211



Technical drawing of the A6.3 hydraulic cylinder, showing dimensions in inches.

Top View:

- Overall width: 48
- Central feature width: 6
- Side feature width: 5

Front View:

- Top thread: 3/8-27UNS-2A
- Top flange diameter: $\varnothing 5.7$
- Top flange thickness: 1.47
- Top flange to main body distance: 18
- Main body height: 57.5
- Main body diameter: 5.7
- Main body to bottom flange distance: 10
- Bottom flange thickness: 2
- Bottom flange diameter: 31 ± 0.2
- Bottom flange to main body distance: 24.6
- Bottom flange to main body distance (inner): 20.2
- Bottom flange to main body distance (outer): 2.5

Side View:

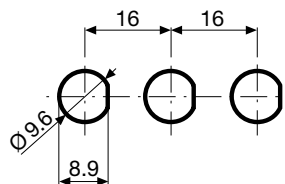
- Overall diameter: 8.8
- Overall height: 57.5

Detail View (Bottom Flange):

- Overall diameter: 14.5
- Thickness: 2.5
- Feature: SW14

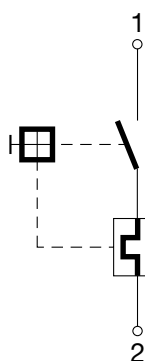
Labels:

- 1, 2, 3: Feature indicators for the main body
- A 6.3: Model identifier

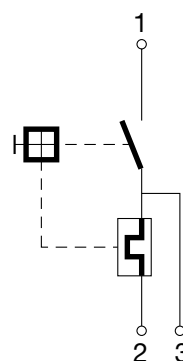


Diagrams

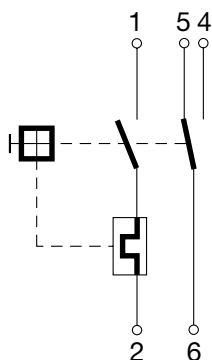
Tap 4,8 x 0,8 mm



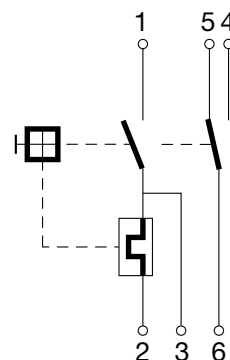
Tap 4,8 x 0,8 mm



Tap 4,8 x 0,8 mm



Tap 4,8 x 0,8 mm



Approval		Main circuit		Auxiliary circuit			
		Rated current	Rated voltage AC	Rated voltage DC	Rated current	Rated voltage AC	Rated voltage DC
	UL 1077	0.05...15 A	240 V	28 V	2 A	120 V	-
	CSA C22.2 No. 235				3 A	-	28 V
	CSA C22.2 No. 235	0.3...16 A	240 V	28 V	1 A	240 V	-
	IEC 60934	0.05...16 A	240 V	28 V	1 A	240 V	28 V
	GB 17701	0.05...16 A	240 V	28 V	1 A	240 V	28 V

Typical internal resistance

Rated Current [A]	Internal Resistance [Ω]
0.05	225.000
0.50	3.300
1.00	0.880
2.00	0.267
3.00	0.128
4.00	0.073
5.00	0.040
6.00	0.031
7.00	0.018
8.00	0.018
9.00	0.010
10.00	0.0087
11.00	0.0087
12.00	0.0087
13.00	0.0087
14.00	0.0070
15.00	0.0070
16.00	0.0055

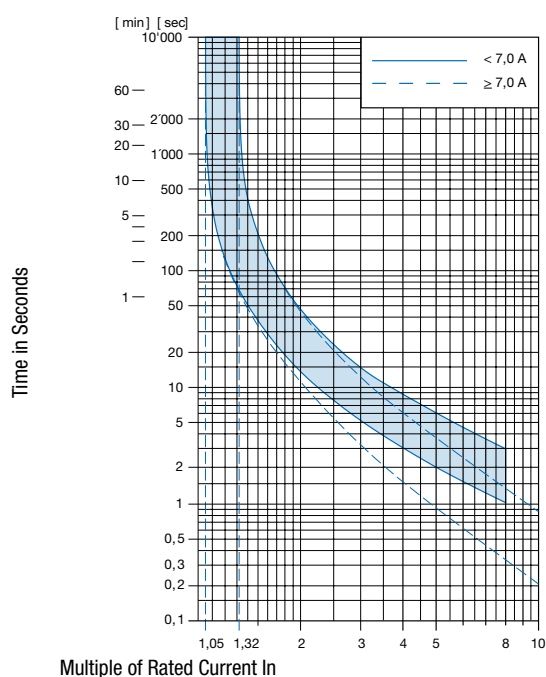
Effect of ambient temperature

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	0.87
0	0.90
10	0.95
23	1.00
30	1.05
40	1.12
50	1.20
60	1.30

Example: Rated current = 5 A; Environmental temperature = 50 °C; --> Correction factor = 1.2; Resulting current = 6.0 A

Time-Current-Curves



Reference Temperature +23°

Config. Code

T12 - 1 2 3 A B C - 1.23

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

T12 - **1** 2 3 A B C - 1.23 = Mounting

Mounting	Configuration key
Threaded neck type with hexagonal- and knurled nut	2

T12 - 1 **2** 3 A B C - 1.23 = Actuation type

Actuation type	Configuration key
Manual ON/OFF (push/push)	2

T12 - 1 2 **3** A B C - 1.23 = Terminal

Terminal	Configuration key
Quick connect terminal 6.3x0.8mm	1

T12 - 1 2 3 **A** B C - 1.23 = Auxiliary contact

Auxiliary contact	Configuration key
Auxiliary contact	S

T12 - 1 2 3 A **B** C - 1.23 = Shunt terminal

Shunt terminal	Configuration key
Shunt terminal	N

T12 - 1 2 3 A B **C** - 1.23 = Setting indication

Setting indication	Configuration key
Setting indication	R

T12 - 1 2 3 A B C - **1.23** = 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

Other rated currents on request

Rated current	Configuration key	Rated current	Configuration key
1.5 A	1.5	5.5 A	5.5
1.6 A	1.6	6.0	6
1.7 A	1.7	6.5 A	6.5
1.8 A	1.8	7.0 A	7
1.9 A	1.9	7.5 A	7.5
2.0 A	2	8.0 A	8
2.1 A	2.1	8.5 A	8.5
2.3 A	2.3	9.0 A	9
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
Other rated currents on request		Other rated currents on request	

Variants

Rated current	Construction variants			Config. Code	Order Number
	Auxiliary contact	Shunt terminal	Setting indication		
3.0 A				T12-221-3	4410.0004
10.0 A				T12-221-10	4410.0015
5.0 A				T12-221-5	4410.0018
1.5 A	●			T12-221S-1.5	4410.0209
2.0 A	●			T12-221S-2	4410.0215

Most Popular.

Availability for all products can be searched real-time: <http://www.schurter.com/Stock-Check/Stock-Check-SCHURTER>

Packaging Unit 20 Pcs

Accessories

Description



T-Line Zubehör
Accessories to T-Line