

Circuit Breaker for Equipment thermal, Rocker actuation, 1 pole



### Description

- Thermal circuit breaker
- 1-pole
- Snap-in version
- Positively trip-free release
- Different rocker colours
- High configurability
- Wide current range

### Standards

- IEC 60934
- UL 1077
- CSA C22.2 235
- GB 17701

### Applications

- Power tools
- Industrial appliances
- Equipment for construction
- Cleaning equipment
- Commercial and household kitchen appliances

### Weblinks

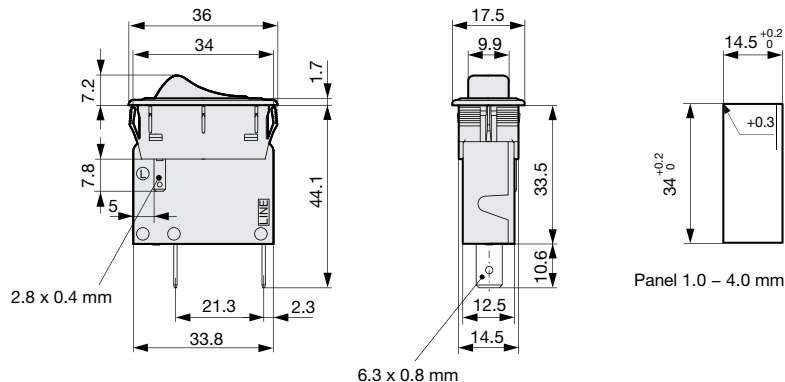
[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#)

### Technical Data

Rated Voltage AC	240 V; 50/60 Hz
Rated Voltage DC	32 V
Rated current range AC	0.05 - 20 A
Conditional short circuit capacity	0.05...20 A: 2 kA, SC (C1) @ 240 VAC
Degree of Protection	from front side IP 40 acc. to IEC 60529
Dielectric Strength	50Hz: > 2.5 kV Impulse 1.2/50 $\mu$ s: > 4 kV
Insulation resistance	500VDC > 100 M $\Omega$
Endurance typical	mechanical: 50'000 switching cycles AC: 1 x I <sub>r</sub> , cos $\phi$ 0.6: 50'000 switching cycles DC: 1 x I <sub>r</sub> , L/R = 2 - 3 ms: 50'000 switching cycles

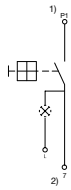
Overload	IEC: min. 40 trips @ 6 x I <sub>r</sub> , cos $\phi$ 0.6 UL / CSA: min. 50 trips @ 1.5 x I <sub>r</sub> , cos $\phi$ 0.75
Ambient temperature	-30 °C to 60 °C
Vibration Resistance	$\pm$ 0.75 mm @ 10 - 60 Hz acc. to IEC 60068-2-6, test Tc 10 G @ 60 - 500 Hz acc. to IEC 60068-2-6, test Tc
Shock Resistance	30 G / 18 ms acc. to IEC 60068-2-27, test Ea
Tripping Type	Thermal
Actuation type	Rocker
Weight	16.5 - 18.5g

### Dimension



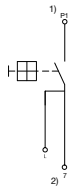
## Diagrams

1-pole, 0 bimetal, illuminated



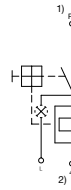
1) Line, 2) Load  
Codepos AAA = CF2, CF4, CF7, CF8, CF9

1-pole, 0 bimetal, non illuminated



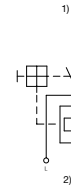
1) Line, 2) Load  
Codepos AAA = CFC, CGC

1-pole, 1 bimetal, illuminated



1) Line, 2) Load  
Codepos AAA = C2F, C4F, C7F, C8F, C9F





1-pole, 1 bimetal, non illuminated



1) Line, 2) Load  
Codepos AAA = CFT, CGT

The keys / codepos are listed in the key table of the basic function for selection.

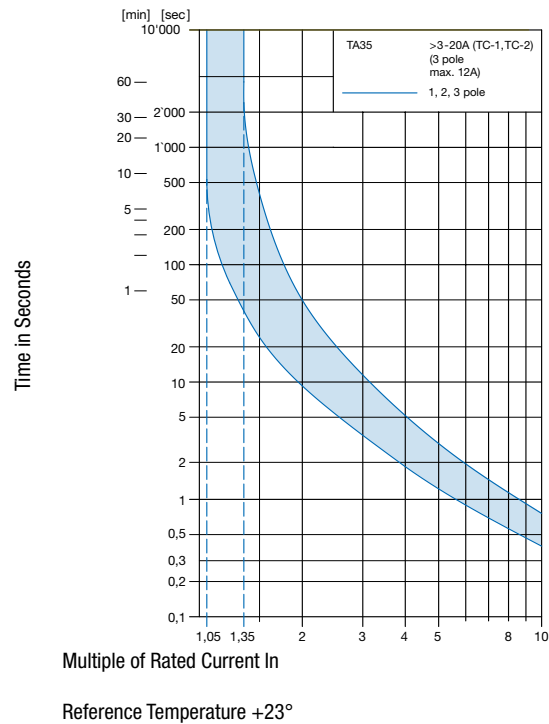
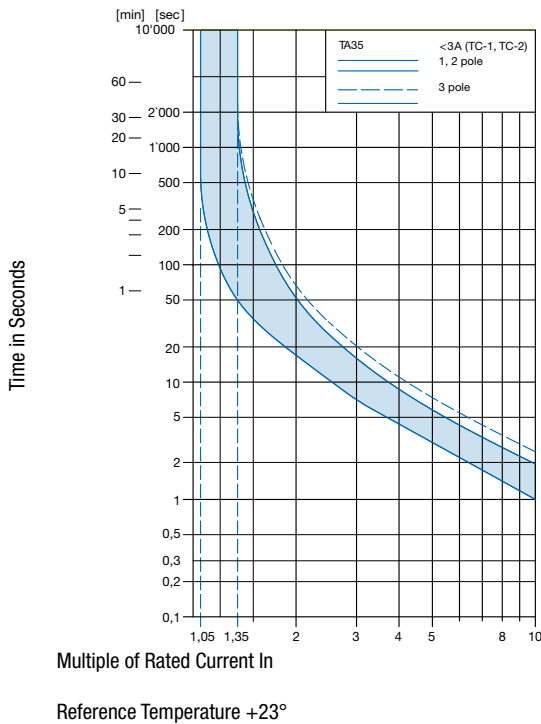
## Approvals

Approval		Rated current	Rated voltage AC	Rated voltage DC
 US	UL 1077	0.05...20 A	240 V	32 V
 US	CSA C22.2 235	0.05...20 A	240 V	32 V
	IEC 60934	0.05...20 A	240 V	32 V
	GB 17701	0.05...20 A	240 V	32 V

## Typical internal resistance

Rated Current [A]	Internal Resistance [ $\Omega$ ]
0.05	200.000
0.1	70.000
0.5	2.750
1.0	0.720
1.5	0.340
2.0	0.187
2.5	0.115
2.8	0.089
3.0	0.059
4.0	0.059
5.0	0.044
6.0	0.028
7.0	0.0142
8.0	0.0142
10.0	0.0109
12.0	0.0086
13.0	0.0072
14.0	0.0072
15.0	0.0056
16.0	0.0056
18.0	0.0052
20.0	0.0052

Time-Current-Curves



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
-30	0.77
-20	0.81
0	0.90
+23	1.00
+40	1.03
+50	1.04
+60	1.06

Example: Rated current = 5 A; Environmental temperature = 50 °C; --> Correction factor = 1.04; Resulting current = 5.2 A --> Found to next higher rated current: 6 A

Config. Code

TA35 - AAA B C 120 C0 - CZMXX

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

TA35 - **AAA** B C 120 C0 - CZMXX = Basic function

Basic function	Configuration key
1-pole, 1 bimetal, illuminated 240 V	C2F
1-pole, 1 bimetal, illuminated 120 V	C4F
1-pole, 1 bimetal, illuminated 24 V	C7F
1-pole, 1 bimetal, illuminated 12 V	C8F
1-pole, 1 bimetal, illuminated 5 V	C9F
1-pole, without bimetal, illuminated 240 V	CF2
1-pole, without bimetal, illuminated 120 V	CF4
1-pole, without bimetal, illuminated 24 V	CF7
1-pole, without bimetal, illuminated 12 V	CF8

Basic function	Configuration key
1-pole, without bimetal, illuminated 5 V	CF9
1-pole, without bimetal, without illumination	CFC
1-pole, 1 bimetal, without illumination	CFT
1-pole, without bimetal, momentary switch, without illumination	CGC
1-pole, 1 bimetal, momentary switch, without illumination	CGT

TA35 - AAA **B** C 120 C0 - CZMXX = Rocker colour

Rocker colour	Configuration key
Clear transparent	1

Rocker colour	Configuration key
Red transparent	3
Green transparent	4
Orange transparent	6
Blue transparent	7
Black	B
Green	G
Red	R
White	W
Orange	X
Yellow	Y

Rated current	Configuration key
0.5 A	J05
0.8 A	J08
1.0 A	J10
1.2 A	J12
1.5 A	J15
2.0 A	J20
2.5 A	J25
3.0 A	030
3.5 A	035
4.0 A	040
5.0 A	050
6.0 A	060
7.0 A	070
8.0 A	080
10.0 A	100
12.0 A	120
13.0 A	130
14.0 A	140
15.0 A	150
16.0 A	160
18.0 A	180
20.0 A	200

Other rated currents on request

## TA35 - AAA B C 120 C0 - CZMXX = Legend

Legend	Configuration key
embossed 	F
white printed 	H
black printed 	K
white printed 	L
black printed 	M

## TA35 - AAA B C 120 C0 - CZMXX = Rated current

Rated current	Configuration key
without thermal overload protection	C00
0.05 A	Z05
0.1 A	J01
0.2 A	J02
0.3 A	J03
0.4 A	J04

Other rated currents on request

## TA35 - AAA B C 120 C0 - CZMXX = Reserve

Reserve	Configuration key
reserve	C0

## TA35 - AAA B C 120 C0 - CZMXX = Accessories

Factory mounted accessories	Configuration key
Without cover	

For subsequent fitting accessories see:

[http://www.schurter.ch/accessory\\_cbe](http://www.schurter.ch/accessory_cbe)

## All Variants

Basic function	Rocker colour	Legend	Rated current	Accessories	Config. Code	Order Number
1-pole, 1 bimetal, without illumination	White	black printed	2.0 A	Without cover	TA35-CFTWKJ20C0	4435.0029
1-pole, 1 bimetal, without illumination	White	embossed	3.0 A	Without cover	TA35-CFTWF030C0	4435.0019
1-pole, 1 bimetal, without illumination	White	black printed	3.0 A	Without cover	TA35-CFTWM030C0	4435.0082
1-pole, 1 bimetal, illuminated 120 V	Red transparent	white printed	3.0 A	Without cover	TA35-C4F3H030C0	4435.0431
1-pole, 1 bimetal, without illumination	Red	black printed	3.0 A	Without cover	TA35-CFTRM030C0	4435.0481
1-pole, 1 bimetal, without illumination	Black	embossed	4.0 A	Without cover	TA35-CFTBF040C0	4435.0028
1-pole, 1 bimetal, without illumination	Black	embossed	5.0 A	Without cover	TA35-CFTBF050C0	4435.0173
1-pole, 1 bimetal, without illumination	Black	white printed	5.0 A	Without cover	TA35-CFTBH050C0	4435.0204

Basic function	Rocker colour	Legend	Rated current	Accessories	Config. Code	Order Number
1-pole, 1 bimetal, without illumination	Black	white printed	6.0 A	Without cover	TA35-CFTBH060C0	4435.0205
1-pole, 1 bimetal, without illumination	Red	embossed	10.0 A	Without cover	TA35-CFTRF100C0	4435.0056
1-pole, 1 bimetal, without illumination	Black	embossed	10.0 A	Without cover	TA35-CFTBF100C0	4435.0174
1-pole, 1 bimetal, momentary switch, without illumination	Black	embossed	10.0 A	Without cover	TA35-CGTBF100C0	4435.0471
1-pole, 1 bimetal, without illumination	White	embossed	13.0 A	Without cover	TA35-CFTWF130C0	4435.0049
1-pole, 1 bimetal, without illumination	White	embossed	15.0 A	Without cover	TA35-CFTWF150C0	4435.0037
1-pole, 1 bimetal, without illumination	Black	embossed	15.0 A	Without cover	TA35-CFTBF150C0	4435.0137
1-pole, 1 bimetal, without illumination	Black	white printed	16.0 A	Without cover	TA35-CFTBH160C0	4435.0209
1-pole, 1 bimetal, without illumination	Black	embossed	16.0 A	Without cover	TA35-CFTBF160C0	4435.0300
1-pole, 1 bimetal, without illumination	Black	white printed	20.0 A	Without cover	TA35-CFTBL200C0	4435.0256
1-pole, without bimetal, without illumination	Black	white printed	without thermal overload protection	Without cover	TA35-CFCBLC00C0	4435.0007
1-pole, without bimetal, without illumination	Black	embossed	without thermal overload protection	Without cover	TA35-CFCBFC00C0	4435.0456

Most Popular.

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

**Packaging Unit** 20 Pcs

### Accessories

#### Description



[TA35 Accessories](#)  
Screw-on collar with cover, IP65