

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

Characteristics

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

Weblinks

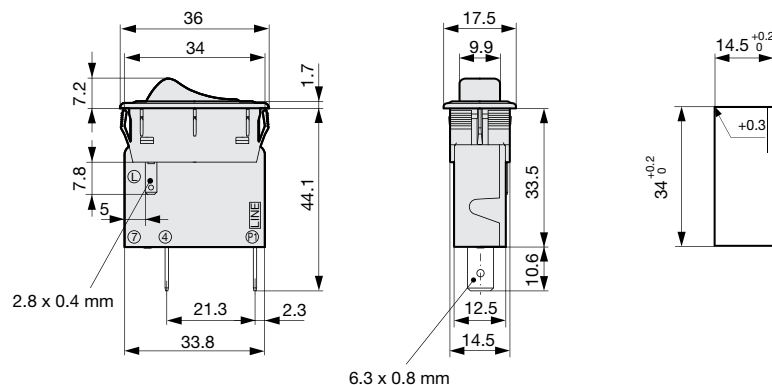
[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

Technical Data

Rated Voltage AC	240 V; 50/60 Hz
Rated Voltage DC	32 V
Rated current	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 μ s: > 4 kV
Insulation resistance	500VDC > 100 M Ω
Endurance typical	mechanical: 50'000 switching operations AC: 1 x I _r , cos ϕ 0.6: 50'000 switching operations DC: 1 x I _r , L/R = 2 - 3 ms: 50'000 switching operations

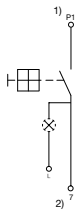
Overload	IEC: min. 40 trips @ 6 x I _r , cos ϕ 0.6 UL / CSA: min. 50 trips @ 1.5 x I _r , cos ϕ 0.75
Ambient temperature	-30 °C to 60 °C
Vibration Resistance	\pm 0.75 mm @ 10 - 60 Hz acc. to IEC 60068-2-6, test Tc 10 G @ 60 - 500 Hz acc. to IEC 60068-2-6, test Tc
Shock Resistance	30 G / 18 ms acc. to IEC 60068-2-27, test Ea
Tripping Type	Thermal positively trip free
Weight	16.5 - 18.5 g

Dimensions



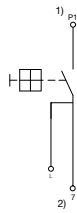
Diagrams

1-pole, 0 bimetal, illuminated



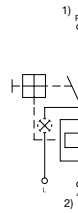
1) Line, 2) Load
Codepos AAA = CF2, CF4, CF7, CF8, CF9

1-pole, 0 bimetal, non illuminated



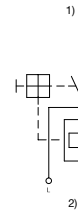
1) Line, 2) Load
Codepos AAA = CFC, CGC

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.

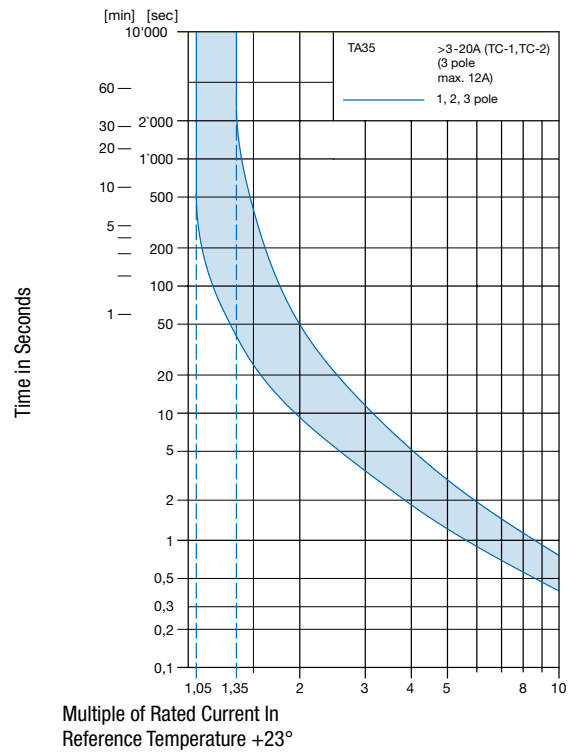
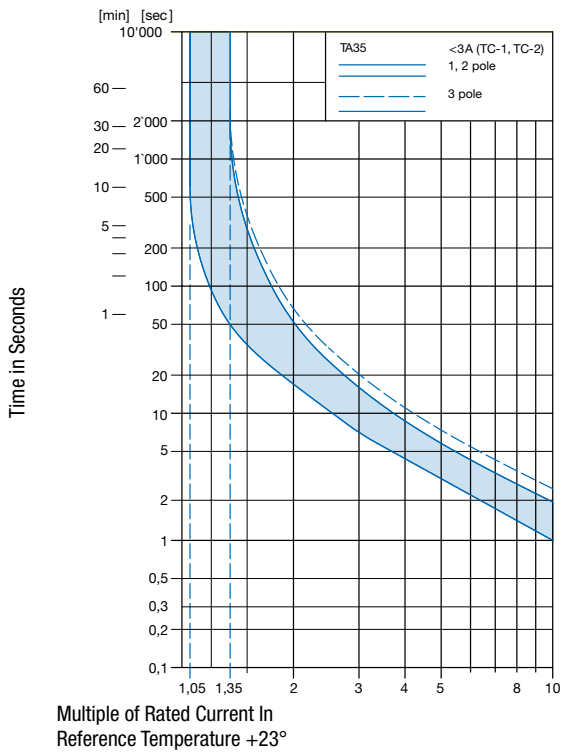
Approvals

Approval		Rated current	Rated voltage AC	Rated voltage DC
	UL 1077	0.05...20 A	240 V	32 V
	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 [Ω]
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



Config. Code

TA35 - AAA B C 120 - CZMXX

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

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

Rocker colour	Configuration key
Clear transparent	1
Red transparent	3
Green transparent	4
Orange transparent	6
Blue transparent	7
Black	B
Green	G
Red	R
White	W
Orange	X
Yellow	Y

TA35 - AAA B **C** 120 - CZMXX = Legend

Legend	Configuration key
I / O embossed	F
ON/OFF white printed	H
ON/OFF black printed	K
I / O white printed	L
I / O black printed	M

TA35 - AAA B C **120** - CZMXX = Rated current

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

Other rated currents on request

TA35 - AAA B C 120 - **CZMXX** = Accessories

Factory mounted accessories	Configuration key
Without cover	

For subsequent fitting accessories see:

http://www.schurter.ch/accessory_cbe

Variants

Basic function	Rocker colour	Legend	Rated current	Accessories	Config. Code	Order Number
1-pole, 1 bimetal, without illumination	White	ON/OFF black printed	2.0 A	Without cover	TA35-CFTWKJ20C0	4435.0029
1-pole, 1 bimetal, without illumination	White	I / O embossed	3.0 A	Without cover	TA35-CFTWF030C0	4435.0019
1-pole, 1 bimetal, without illumination	White	I / O black printed	3.0 A	Without cover	TA35-CFTWM030C0	4435.0082
1-pole, 1 bimetal, illuminated 120 V	Red transparent	ON/OFF white printed	3.0 A	Without cover	TA35-C4F3H030C0	4435.0431
1-pole, 1 bimetal, without illumination	Red	I / O black printed	3.0 A	Without cover	TA35-CFTRM030C0	4435.0481
1-pole, 1 bimetal, without illumination	Black	I / O embossed	4.0 A	Without cover	TA35-CFTBF040C0	4435.0028
1-pole, 1 bimetal, without illumination	Black	I / O embossed	5.0 A	Without cover	TA35-CFTBF050C0	4435.0173
1-pole, 1 bimetal, without illumination	Black	ON/OFF white printed	5.0 A	Without cover	TA35-CFTBH050C0	4435.0204
1-pole, 1 bimetal, without illumination	Black	ON/OFF white printed	6.0 A	Without cover	TA35-CFTBH060C0	4435.0205
1-pole, 1 bimetal, without illumination	Red	I / O embossed	10.0 A	Without cover	TA35-CFTRF100C0	4435.0056
1-pole, 1 bimetal, without illumination	Black	I / O embossed	10.0 A	Without cover	TA35-CFTBF100C0	4435.0174
1-pole, 1 bimetal, momentary switch, without illumination	Black	I / O embossed	10.0 A	Without cover	TA35-CGTBF100C0	4435.0471
1-pole, 1 bimetal, without illumination	White	I / O embossed	13.0 A	Without cover	TA35-CFTWF130C0	4435.0049
1-pole, 1 bimetal, without illumination	White	I / O embossed	15.0 A	Without cover	TA35-CFTWF150C0	4435.0037
1-pole, 1 bimetal, without illumination	Black	I / O embossed	15.0 A	Without cover	TA35-CFTBF150C0	4435.0137
1-pole, 1 bimetal, without illumination	Black	ON/OFF white printed	16.0 A	Without cover	TA35-CFTBH160C0	4435.0209
1-pole, 1 bimetal, without illumination	Black	I / O embossed	16.0 A	Without cover	TA35-CFTBF160C0	4435.0300
1-pole, 1 bimetal, without illumination	Black	I / O white printed	20.0 A	Without cover	TA35-CFTBL200C0	4435.0256
1-pole, without bimetal, without illumination	Black	I / O white printed	without thermal overload protection	Without cover	TA35-CFCBL00C0	4435.0007
1-pole, without bimetal, without illumination	Black	I / O embossed	without thermal overload protection	Without cover	TA35-CFCBF00C0	4435.0456

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:

Example

Ambient temperature [°C]	Correction factor	Rated current at +23°C	Example
-30	0.77		Ambient temperature [°C] +50°C
-20	0.81		Correction factor 1.04
0	0.90		Chosen rated current at +50°C ambient temperature 5.0 A x 1.04 = 5.2 A
+23	1.00		
+40	1.03		
+50	1.04		
+60	1.06		

Accessories

Description



4435.0052
Screw-on collar with cover, IP65, 1 pole