

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

- Approval Reference Type: TA35
- IEC 60934
- UL 1077
- CSA C22.2 No. 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](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#)

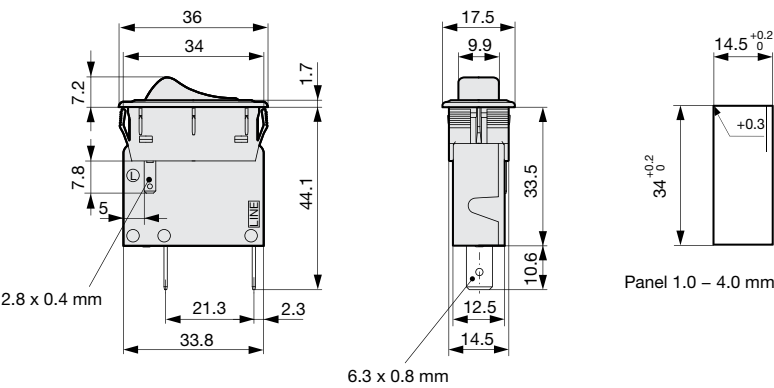
Technical Data

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 µs: > 4 kV
Insulation resistance	500 VDC > 100 MΩ
Endurance typical	mechanical: 50'000 switching cycles AC: 1 x I _r , cos φ 0.6: 30'000 switching cycles DC: 1 x I _r , L/R = 2 - 3 ms: 50'000 switching cycles

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	± 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 - 18.5 g

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [General Product Information](#)

Dimension



Diagrams

1-pole, 1 bimetal, illuminated 1-pole, 1 bimetal, non illuminated



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



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

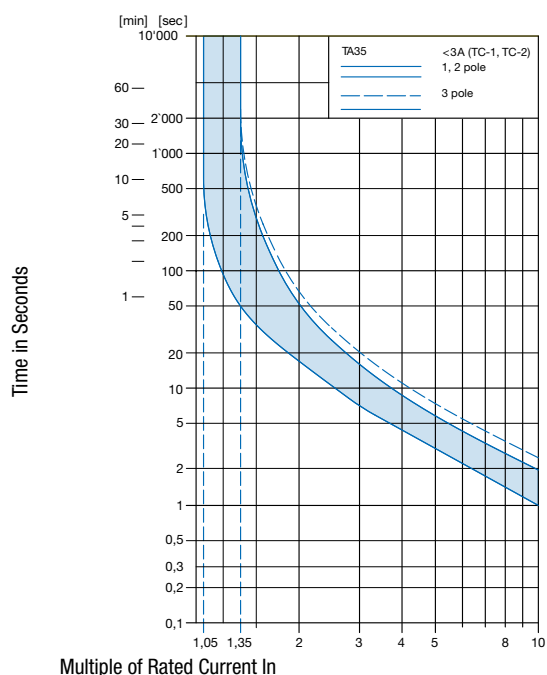
The keys / codepos are listed in the key table of the basic function for selection.

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

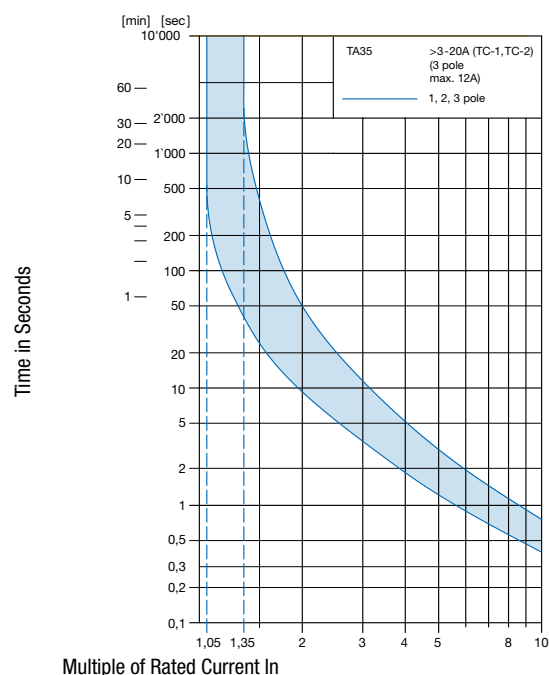
Rated Current [A]	Internal Resistance [Ω]
0.05	200.000
0.1	70.000
0.5	2.750
1.0	0.720
1.5	0.340
2.0	0.187
2.5	0.115
2.8	0.089
3.0	0.059
4.0	0.059
5.0	0.044
6.0	0.028
7.0	0.0142
8.0	0.0142
10.0	0.0109
12.0	0.0086
13.0	0.0072
14.0	0.0072
15.0	0.0056
16.0	0.0056
18.0	0.0052
20.0	0.0052

Time-Current-Curves



Multiple of Rated Current I_n

Reference Temperature $+23^\circ$



Multiple of Rated Current I_n

Reference Temperature $+23^\circ$

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 --> Fount to next higher rated current: 6 A

Config. Code

TA35 - CBD B F 120 C0 - CZMXX

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

TA35 - **CBD** B F 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, 1 bimetal, without illumination	CFT
1-pole, 1 bimetal, momentary switch, without illumination	CGT

TA35 - CBD **B** F 120 C0 - 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 - CBD B **F** 120 C0 - CZMXX = Legend

Legend	Configuration key
embossed	F
white printed	H
black printed	K

Legend

white printed



L

black printed



M

Configuration key

TA35 - CBD B F **120** C0 - CZMXX = Rated current

Rated current	Configuration key
without thermal overload protection / temporarily without VDE approval	C00
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

Other rated currents on request

Rated current	Configuration key
18.0 A	180
20.0 A	200
Other rated currents on request	

TA35 - CBD B F 120 **C0** - CZMXX = Reserve

Reserve	Configuration key
reserve	C0

TA35 - CBD B F 120 C0 - **CZMXX** = Accessories

Factory mounted accessories	Configuration key
Without cover	

For subsequent fitting accessories see:

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
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

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



TA35 Accessories
Screw-on collar with cover, IP65

Mouser Electronics

Authorized Distributor

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

Schurter:

4435.0001	4435.0004	4435.0005	4435.0006	4435.0007	4435.0019	4435.0021	4435.0028	4435.0029	4435.0034
4435.0035	4435.0036	4435.0037	4435.0049	4435.0056	4435.0081	4435.0082	4435.0083	4435.0084	4435.0101
4435.0102	4435.0103	4435.0312	4435.0313	4435.0361	4435.0385	4435.0137	4435.0173	4435.0138	4435.0171
4435.0172	4435.0174	4435.0175	4435.0176	4435.0177	4435.0178	4435.0179	4435.0181	4435.0182	4435.0196
4435.0197	4435.0198	4435.0199	4435.0201	4435.0202	4435.0203	4435.0204	4435.0205	4435.0206	4435.0207
4435.0208	4435.0209	4435.0241	4435.0244	4435.0245	4435.0253	4435.0254	4435.0255	4435.0256	4435.0257
4435.0259	4435.0261	4435.0274	4435.0281	4435.0282	4435.0292	4435.0293	4435.0294	4435.0295	4435.0296
4435.0297	4435.0298	4435.0299	4435.0301	4435.0302	4435.0323	4435.0344	4435.0359	4435.0260	4435.0030
4435.0120	4435.0020	4435.0300	4435.0210	4435.0180	4435.0170	4435.0200	4435.0370	4435.0579	