

Circuit Breaker for Equipment thermal, Rocker actuation, 3 poles



### Description

- Thermal circuit breaker
- 3-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

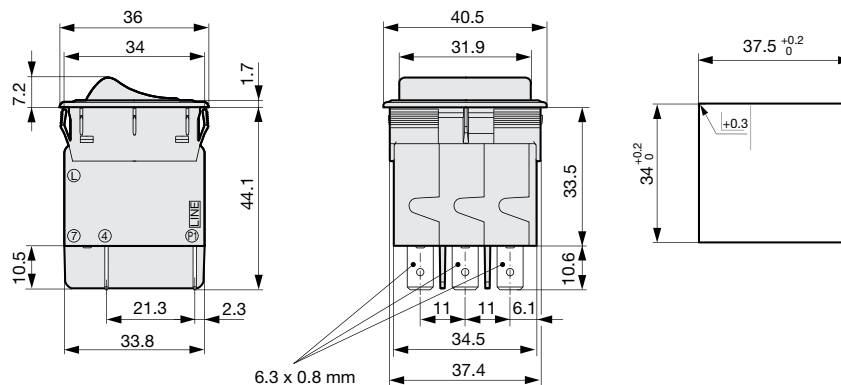
[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [e-Shop](#), [SCHURTER-Stock-Check](#), [Distributor-Stock-Check](#), [Detailed request for product](#)

### Technical Data

Rated Voltage AC	415 Y / 240 V; 50/60 Hz
Rated current	0.05 - 12 A
Conditional short circuit capacity	0.05...12 A: 2 kA @ 415 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	500 VDC > 100 M $\Omega$
Endurance typical	mechanical: 50'000 switching operations AC: 1 x I <sub>r</sub> , cos $\phi$ 0.6: 50'000 switching operations DC: 1 x I <sub>r</sub> , L/R = 2 - 3 ms: 50'000 switching operations

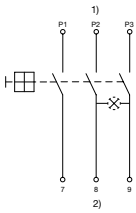
Overload	IEC: min. 40 trips @ 6 x I <sub>r</sub> , cos $\phi$ 0.6 UL / CSA: min. 50 trips @ 1.5 x I <sub>r</sub> , cos $\phi$ 0.75
Ambient temperature	-30 °C to 60 °C
Vibration Resistance	$\pm$ 0.75 mm @ 10 - 60 Hz acc. to IEC 60068-2-6, test Tc 10 G @ 60 - 500 Hz acc. to IEC 60068-2-6, test Tc
Shock Resistance	30 G / 18 ms acc. to IEC 60068-2-27, test Ea
Tripping Type	Thermal positively trip free
Weight	43.0 - 45.0 g

### Dimensions



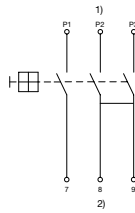
## Diagrams

3-pole, 0 bimetal, illuminated



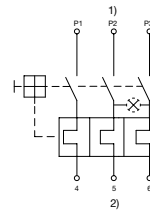
1) Line, 2) Load  
Codepos AAA = CK1

3-pole, 0 bimetal, non illuminated



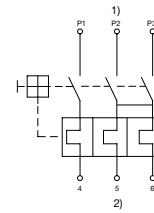
1) Line, 2) Load  
Codepos AAA = KKC, CLC

3-pole, 3 bimetal, illuminated



1) Line, 2) Load  
Codepos AAA = CD1





3-pole, 3 bimetal, non illuminated



1) Line, 2) Load  
Codepos AAA = CKD, CLD

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

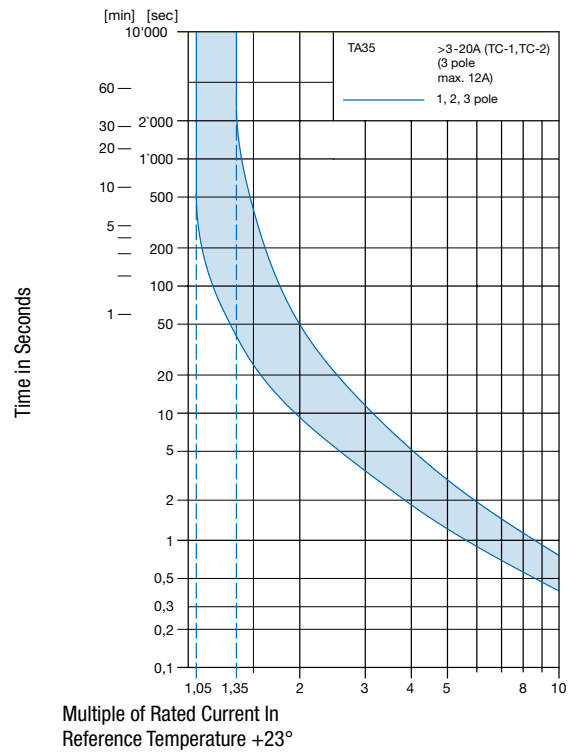
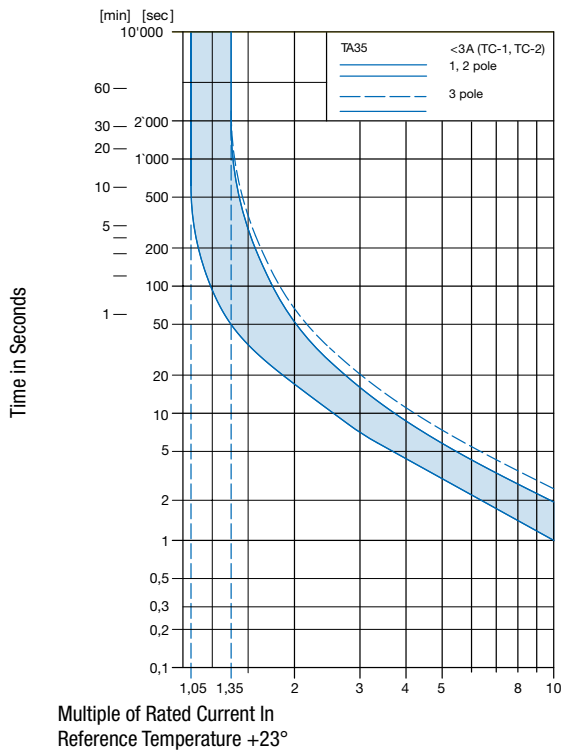
## Approvals

Approval		Rated current	Rated voltage AC	Rated voltage DC
 US	UL 1077	0.05...12 A	415 Y/ 240 V	-
 US	CSA C22.2 235	0.05...12 A	415 Y/ 240 V	-
	IEC 60934	0.05...20 A	415 Y/ 240 V	-
	GB 17701	0.05...12 A	415 Y/ 240 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



## 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
3-pole, 3 bimetal, illuminated 415 V	CD1
3-pole, without bimetal, illuminated 415 V	CK1
3-pole, without bimetal, without illumination	CKC
3-pole, 3 bimetal, without illumination	CKD
3-pole, without bimetal, momentary switch, without illumination	CLC
3-pole, 3 bimetal, momentary switch, without illumination	CLD

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](http://www.schurter.ch/accessory_cbe)

## Variants

Basic function	Rocker colour	Legend	Rated current	Accessories	Config. Code	Order Number
3-pole, 3 bimetal, without illumination	Black	ON/OFF white printed	2.5 A	Without cover	TA35-CKDBHJ25C0	4435.0229
3-pole, 3 bimetal, without illumination	White	I / O embossed	3.0 A	Without cover	TA35-CKDWF030C0	4435.0025
3-pole, 3 bimetal, without illumination	Black	ON/OFF white printed	4.0 A	Without cover	TA35-CKDBH040C0	4435.0232
3-pole, 3 bimetal, without illumination	White	I / O embossed	5.0 A	Without cover	TA35-CKDWF050C0	4435.0044
3-pole, 3 bimetal, without illumination	Black	ON/OFF white printed	5.0 A	Without cover	TA35-CKDBH050C0	4435.0048
3-pole, 3 bimetal, without illumination	Black	ON/OFF white printed	6.0 A	Without cover	TA35-CKDBH060C0	4435.0233
3-pole, 3 bimetal, without illumination	White	I / O embossed	10.0 A	Without cover	TA35-CKDWF100C0	4435.0050
3-pole, 3 bimetal, without illumination	Black	ON/OFF white printed	10.0 A	Without cover	TA35-CKDBH100C0	4435.0235
3-pole, 3 bimetal, without illumination	White	I / O embossed	12.0 A	Without cover	TA35-CKDWF120C0	4435.0017
3-pole, 3 bimetal, illuminated 415 V	Red transparent	I / O white printed	12.0 A	Without cover	TA35-CD13L120C0	4435.0414
3-pole, without bimetal, without illumination	Black	I / O embossed	without thermal overload protection	Without cover	TA35-CKCBFC00C0	4435.0288
3-pole, without bimetal, without illumination	White	I / O black printed	without thermal overload protection	Without cover	TA35-CKCWMC00C0	4435.0411

## 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	0.76	5.0 A	Ambient temperature [°C]
-20	0.81		+50°C
0	0.90		Correction factor
+23	1.00		1.10
+40	1.06		Chosen rated current at +50°C ambient temperature
+50	1.10		5.0 A x 1.10 = 5.2 A
+60	1.14		

## Accessories

## Description



4435.0054  
Screw-on collar with cover, IP65, 3 pole