

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

- 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

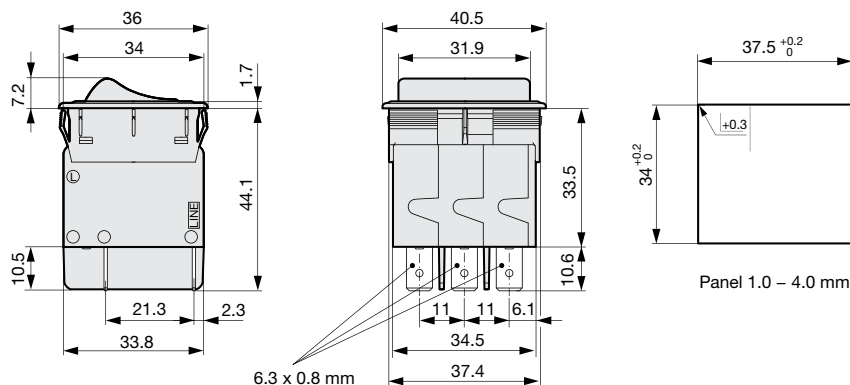
[pdf-datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#)

Technical Data

Rated Voltage AC	415 Y / 240 V; 50/60 Hz
Rated current range AC	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 μ s: > 4 kV
Insulation resistance	500 VDC > 100 M Ω
Endurance typical	mechanical: 50'000 switching cycles AC: 1 x I _r , cos ϕ 0.6: 50'000 switching cycles DC: 1 x I _r , L/R = 2 - 3 ms: 50'000 switching cycles

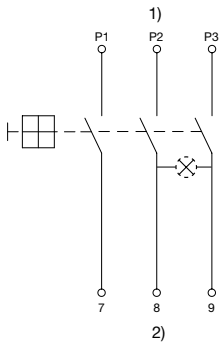
Overload	IEC: min. 40 trips @ 6 x I _r , cos ϕ 0.6 UL / CSA: min. 50 trips @ 1.5 x I _r , cos ϕ 0.75
Ambient temperature	-30 °C to 60 °C
Vibration Resistance	$\pm$ 0.75 mm @ 10 - 60 Hz acc. to IEC 60068-2-6, test Tc 10 G @ 60 - 500 Hz acc. to IEC 60068-2-6, test Tc
Shock Resistance	30 G / 18 ms acc.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

Dimension



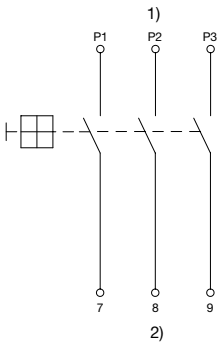
Diagrams

3-pole, 0 bimetal, illuminated



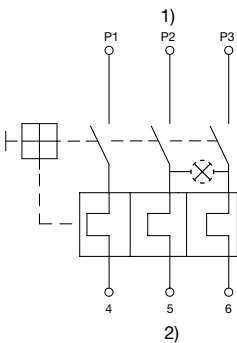
1) Line, 2) Load
Codepos AAA = CK1

3-pole, 0 bimetal, non illuminated



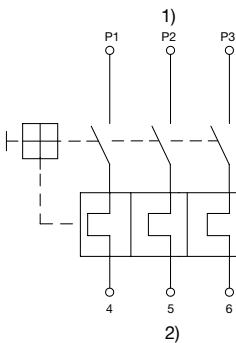
1) Line, 2) Load
Codepos AAA = CKC, CLC

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
	UL 1077	0.05...12 A	415 Y/ 240 V	-
	CSA C22.2 235	0.05...12 A	415 Y/ 240 V	-
	IEC 60934	0.05...12 A	415 Y/ 240 V	-
	GB 17701	0.05...12 A	415 Y/ 240 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

TA35 Rocker 3-poles max. 12 A

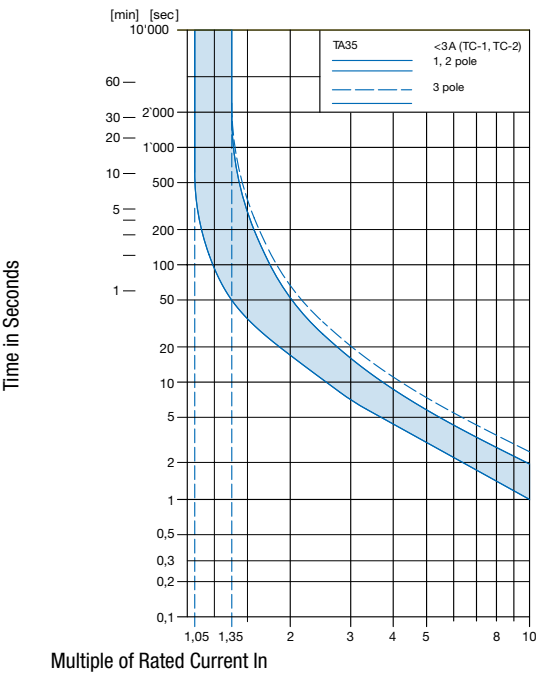
Effect of ambient temperature

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:

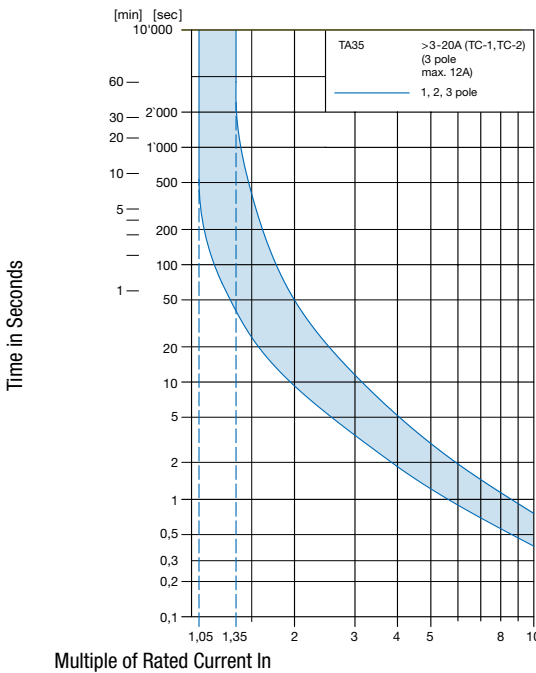
Ambient temperature [°C]	Correction factor
-30	0.76
-20	0.81
0	0.90
+23	1.00
+40	1.06
+50	1.10
+60	1.14

Example: Rated current = 5 A; Environmental temperature = 50 °C; --> Correction factor = 1.10; Resulting current = 5.2 A --> Fount to next higher rated current: 6 A

Time-Current-Curves



Reference Temperature +23°



Reference Temperature +23°

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
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 - 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
white printed	L
black printed	M

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

Other rated currents on request

Rated current	Configuration key
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

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
3-pole, 3 bimetal, without illumination	Black	white printed	2.5 A	Without cover	TA35-CKDBHJ25C0	4435.0229
3-pole, 3 bimetal, without illumination	White	embossed	3.0 A	Without cover	TA35-CKDWF030C0	4435.0025
3-pole, 3 bimetal, without illumination	Black	white printed	4.0 A	Without cover	TA35-CKDBH040C0	4435.0232
3-pole, 3 bimetal, without illumination	White	embossed	5.0 A	Without cover	TA35-CKDWF050C0	4435.0044
3-pole, 3 bimetal, without illumination	Black	white printed	5.0 A	Without cover	TA35-CKDBH050C0	4435.0048
3-pole, 3 bimetal, without illumination	Black	white printed	6.0 A	Without cover	TA35-CKDBH060C0	4435.0233
3-pole, 3 bimetal, without illumination	White	embossed	10.0 A	Without cover	TA35-CKDWF100C0	4435.0050
3-pole, 3 bimetal, without illumination	Black	white printed	10.0 A	Without cover	TA35-CKDBH100C0	4435.0235
3-pole, 3 bimetal, without illumination	White	embossed	12.0 A	Without cover	TA35-CKDWF120C0	4435.0017
3-pole, 3 bimetal, illuminated 415 V	Red transparent	white printed	12.0 A	Without cover	TA35-CD13L120C0	4435.0414
3-pole, without bimetal, without illumination	Black	embossed	without thermal overload protection / temporarily without VDE approval	Without cover	TA35-CKCBFC00C0	4435.0288
3-pole, without bimetal, without illumination	White	black printed	without thermal overload protection / temporarily without VDE approval	Without cover	TA35-CKCWMC00C0	4435.0411

Most Popular.

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

Packaging Unit 10 Pcs

Accessories

Description



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