

Circuit Breaker for Equipment thermal, Rocker actuation, 2 pole



### Description

- Thermal circuit breaker
- 2-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

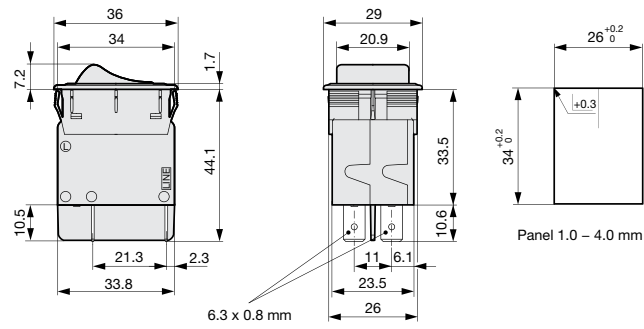
[pdf datasheet](#), [html-datasheet](#), [General Product Information](#), [Approvals](#), [CE declaration of conformity](#), [RoHS](#), [CHINA-RoHS](#), [REACH](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#)

### Technical Data

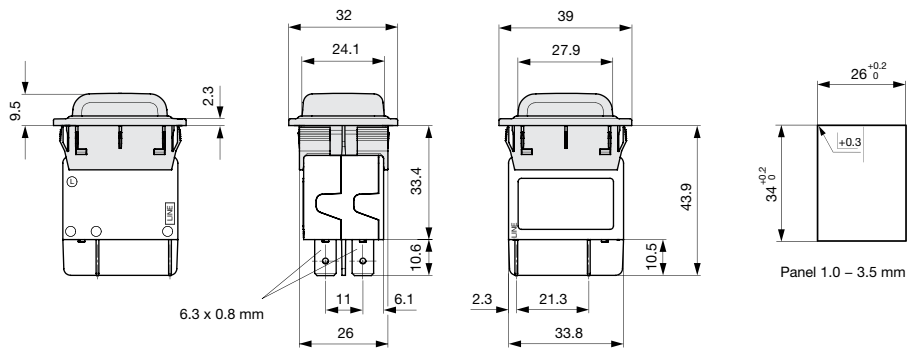
Rated Voltage AC	240 V; 50/60 Hz	Overload	IEC: min. 40 trips @ 6 x I <sub>r</sub> , cos φ 0.6
Rated Voltage DC	60 V		UL / CSA: min. 50 trips @ 1.5 x I <sub>r</sub> , cos φ 0.75
Rated current range AC	0.05 - 20 A	Ambient temperature	-30°C to 60°C
Conditional short circuit capacity	0.05...20 A: 2 kA, SC (C1) @ 240 VAC	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
Degree of Protection	from front side IP 40 acc. to IEC 60529	Shock Resistance	30 G / 18 ms acc. to IEC 60068-2-27, test Ea
Dielectric Strength	50Hz: > 2.5 kV Impulse 1.2/50 μs: > 4 kV	Tripping Type	Thermal
Insulation Resistance	500VDC > 100 MΩ	Actuation Type	Rocker
Endurance typical	mechanical: 50'000 switching cycles AC: 1 x I <sub>r</sub> , cos φ 0.6: 50'000 switching cycles DC: 1 x I <sub>r</sub> , L/R = 2 - 3 ms: 50'000 switching cycles	Weight	29.0 - 31.5 g

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

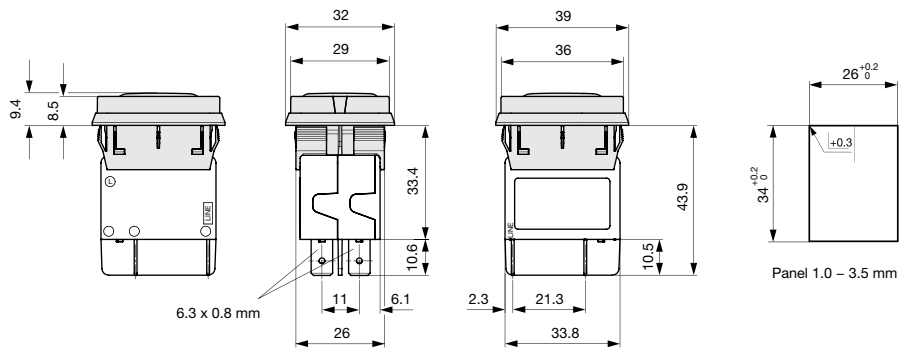
## Dimension [mm]



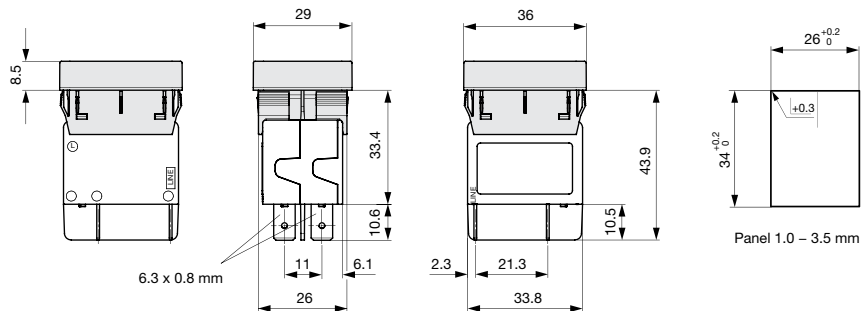
### Accessories / CZM21, factory mounted transparent cover, IP65



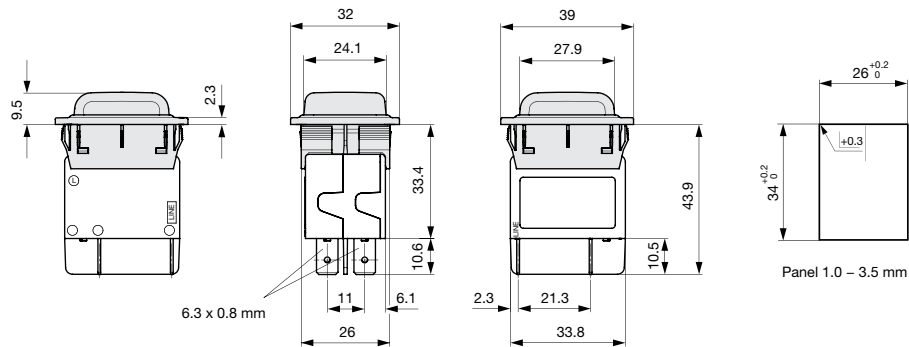
### Accessories / CZM23, factory mounted raised collar with transparent cover, IP65



### Accessories / CZM24, factory mounted raised collar without cover, IP40

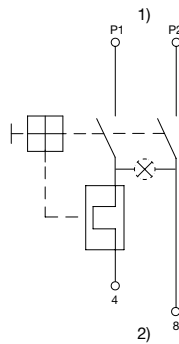


Accessories / CZM25, factory mounted transparent cover, antibacterial, IP65



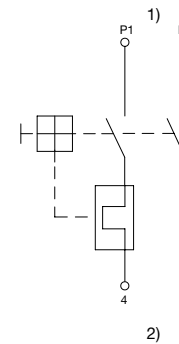
Diagrams

2-pole, 1 bimetal, illuminated



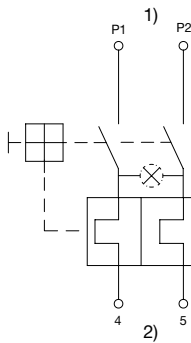
1) Line, 2) Load  
Codepos AAA = C12, C14, C17, C18, C19

2-pole, 1 bimetal, non illuminated



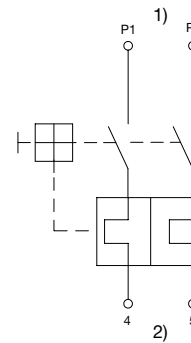
1) Line, 2) Load  
Codepos AAA = CBT, CET

2-pole, 2 bimetal, illuminated







1) Line, 2) Load  
Codepos AAA = C32, C34, C37, C38, C39

2-pole, 2 bimetal, non illuminated



1) Line, 2) Load  
Codepos AAA = CBD, CED

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	60 V
 US	CSA C22.2 235	0.05...20 A	240 V	60 V
	IEC 60934	0.05...20 A	240 V	60 V
	GB 17701	0.05...20 A	240 V	60 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

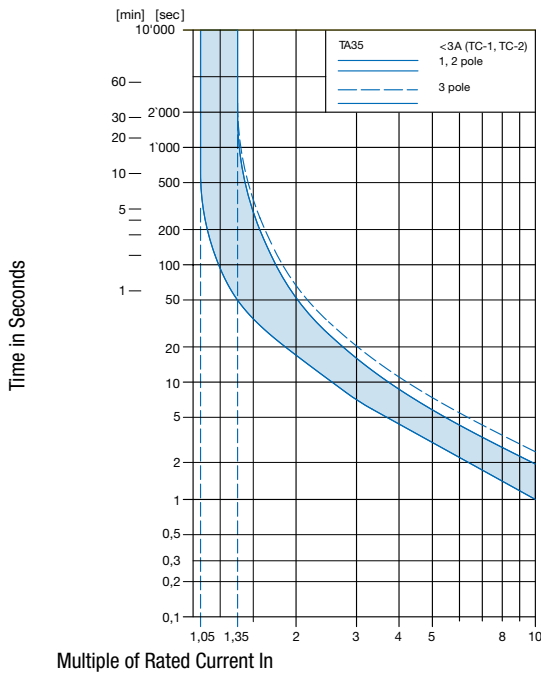
## Effect of ambient temperature

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	1.03
+50	1.04
+60	1.06

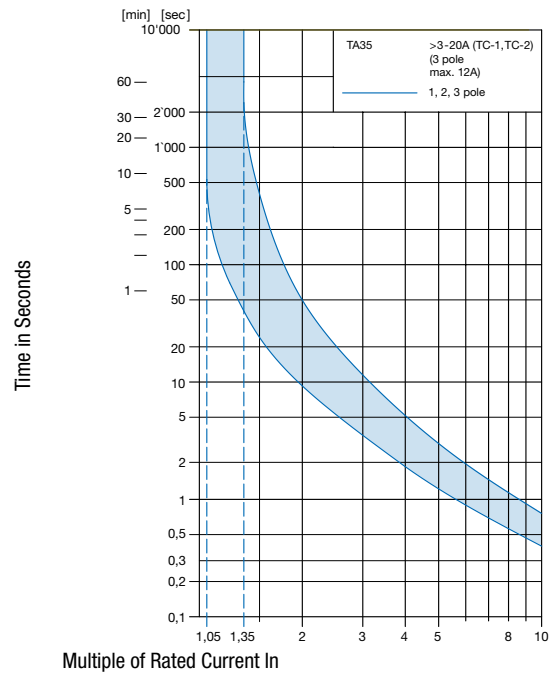
Example: Rated current = 5 A; Environmental temperature = 50 °C; --> Correction factor = 1.04; Resulting current = 5.2 A --> Fount to next higher rated current: 6 A

Time-Current-Curves



Multiple of Rated Current In

Reference Temperature +23°



Multiple of Rated Current In

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
2-pole, 1 bimetal, illuminated 240 V	C12
2-pole, 1 bimetal, illuminated 120 V	C14
2-pole, 1 bimetal, illuminated 24 V	C17
2-pole, 1 bimetal, illuminated 12 V	C18
2-pole, 1 bimetal, illuminated 5 V	C19
2-pole, 2 bimetal, illuminated 240 V	C32
2-pole, 2 bimetal, illuminated 120 V	C34
2-pole, 2 bimetal, illuminated 24 V	C37
2-pole, 2 bimetal, illuminated 12 V	C38
2-pole, 2 bimetal, illuminated 5 V	C39
2-pole, 2 bimetal, without illumination	CBD
2-pole, 1 bimetal, without illumination	CBT
2-pole, 2 bimetal, momentary switch, without illumination	CED
2-pole, 1 bimetal, momentary switch, without illumination	CET

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

Rocker colour	Configuration key
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
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

Other rated currents on request

Rated current	Configuration key
15.0 A	150
16.0 A	160
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	
Transparent cover antibacterial, IP65	*CZM25
Transparent cover, IP65	CZM21
Raised collar with transparent cover, IP65	CZM23
Raised collar, IP65	CZM24

For subsequent fitting accessories see:

[http://www.schurter.com/pdf/english/typ\\_TA35\\_Accessories.pdf](http://www.schurter.com/pdf/english/typ_TA35_Accessories.pdf)

\*CCC Approval pending

## All Variants

Basic function	Rocker colour	Legend	Rated current	Accessories	Config. Code	Order Number
2-pole, 2 bimetal, without illumination	White	embossed	3.0 A	Without cover	TA35-CBDWF030C0	4435.0022
2-pole, 2 bimetal, without illumination	White	black printed	3.0 A	Without cover	TA35-CBDWM030C0	4435.0374
2-pole, 2 bimetal, without illumination	Black	white printed	4.0 A	Without cover	TA35-CBDBH040C0	4435.0276
2-pole, 2 bimetal, without illumination	White	embossed	5.0 A	Without cover	TA35-CBDWF050C0	4435.0039
2-pole, 1 bimetal, without illumination	White	embossed	6.0 A	Without cover	TA35-CBTWF060C0	4435.0042
2-pole, 2 bimetal, illuminated 240 V	Green transparent	white printed	6.0 A	Without cover	TA35-C324H060C0	4435.0265
2-pole, 1 bimetal, without illumination	White	embossed	8.0 A	Without cover	TA35-CBTWF080C0	4435.0046
2-pole, 1 bimetal, without illumination	Black	white printed	8.0 A	Without cover	TA35-CBTBL080C0	4435.0067
2-pole, 2 bimetal, illuminated 240 V	Blue transparent	white printed	8.0 A	Transparent cover, IP65	TA35-C327L080C0-CZM21	4435.0483
2-pole, 1 bimetal, without illumination	Black	white printed	10.0 A	Without cover	TA35-CBTBL100C0	4435.0012
2-pole, 1 bimetal, without illumination	White	embossed	10.0 A	Without cover	TA35-CBTWF100C0	4435.0047
2-pole, 2 bimetal, without illumination	White	black printed	10.0 A	Without cover	TA35-CBDWM100C0	4435.0091
2-pole, 1 bimetal, illuminated 240 V	Green transparent	embossed	10.0 A	Without cover	TA35-C124F100C0	4435.0187
2-pole, 2 bimetal, without illumination	White	embossed	10.0 A	Without cover	TA35-CBDWF100C0	4435.0195
2-pole, 2 bimetal, without illumination	White	embossed	12.0 A	Without cover	TA35-CBDWF120C0	4435.0304
2-pole, 2 bimetal, without illumination	White	embossed	15.0 A	Without cover	TA35-CBDWF150C0	4435.0041
2-pole, 2 bimetal, without illumination	Black	embossed	15.0 A	Without cover	TA35-CBDBF150C0	4435.0347
2-pole, 2 bimetal, without illumination	White	black printed	15.0 A	Raised collar with transparent cover, IP65	TA35-CBDWM150C0-CZM23	4435.0423
2-pole, 1 bimetal, without illumination	White	embossed	20.0 A	Without cover	TA35-CBTWF200C0	4435.0002
2-pole, 2 bimetal, without illumination	White	embossed	20.0 A	Without cover	TA35-CBDWF200C0	4435.0013
2-pole, 2 bimetal, without illumination	Black	white printed	20.0 A	Without cover	TA35-CBDBL200C0	4435.0321

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Basic function	Rocker colour	Legend	Rated current	Accessories	Config. Code	Order Number
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**Packaging Unit**    10 Pcs

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## Accessories

### Description



[TA35 Accessories](#)

Screw-on collar with cover, IP65

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