

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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#### Circuit Breaker for Equipment thermal, Rocker actuation, 2 pole





#### See below:

# **Approvals and Compliances**

# **Description**

- Thermal circuit breaker
- 2-pole
- Snap-in version
- Positively trip-free release
- Different rocker colours
- High configurability
- Wide current range

# **Applications**

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

pdf datasheet, html-datasheet, General Product Information, Distributor-Stock-Check, Detailed request for product, Product News

#### **Technical Data**

Rated Voltage AC	240 V; 50/60 Hz
Rated Voltage DC	60 V
Rated current range AC	0.05 - 20 A
Conditional short circuit ca-	0.0520 A: 2 kA, SC (C1) @ 240 VAC
pacity	
Degree of Protection	from front side IP 40 acc. to IEC 60529
Dielectric Strength	50 Hz: > 2.5 kV
	Impulse 1.2/50 µs: > 4 kV
Insulation Resistance	$500\text{VDC} > 100\text{M}\Omega$
Lifetime	mechanical: 50'000 switching cycles
	AC: 1 x lr, cos φ 0.6:
	50'000 switching cycles
	DC: 1 x lr, $L/R = 2 - 3$ ms:
	50'000 switching cycles

Overload	IEC: min. 40 trips
	@ 6 x lr, cos φ 0.6
	UL / CSA: min. 50 trips
	@ 1.5 x lr, 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 / 18ms
	acc. to IEC 60068-2-27, test Ea
Tripping Type	Thermal
Actuation Type	Rocker
Weight	29.0 - 31.5g

# **Approvals and Compliances**

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in Details about Approvals

#### **Approvals**

The approval mark is used by the testing authorities to certify compliance with the safety requirements placed on electronic products. Approval Reference Type: TA35

Approval Logo	Certificates	Certification Body	Description
<b>₽</b> VE	VDE Approvals	VDE	VDE Certificate Number: 40019754
c <b>FL</b> °us	UL Approvals	UL	UL File Number: E71572
(I)	CQC Approvals	CQC	CCC Certificate Number: 2013010307598660

#### **Product standards**

Product standards that are referenced

Electrical Equipment
Ξ

# **Application standards**

Application standards where the product can be used

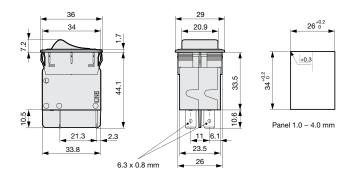
Organization	Design	Standard	Description
<u>IEC</u>	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technologyequipment.

#### Compliances

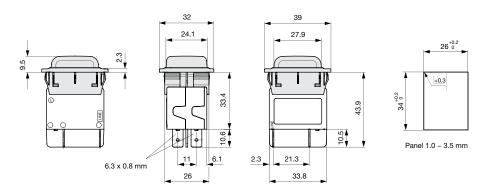
The product complies with following Guide Lines

Identification	Details	Initiator	Description
C€	CE declaration of conformity	SCHURTER AG	The CE marking declares that the product complies with the applicable requirements laid down in the harmonisation of Community legislation on its affixing in accordance with EU Regulation 765/2008.
RoHS	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
<b>5</b>	China RoHS	SCHURTER AG	The law SJ / T 11363-2006 (China RoHS) has been in force since 1 March 2007. It is similar to the EU directive RoHS.
REACH	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

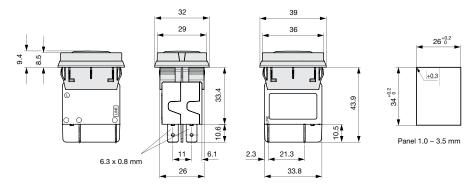
# Dimension [mm]



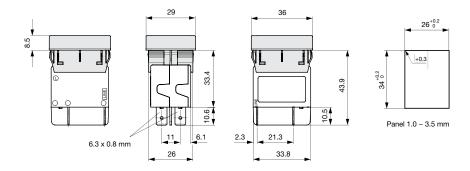
# Accessories / CZM21, factory mounted transparent cover, IP65



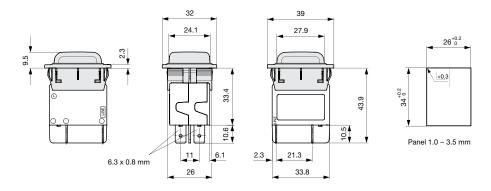
# Accessories / CZM23, factory mounted raised collar with transparent cover, IP65



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

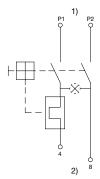


Accessories / CZM25, factory mounted transparent cover, antibacterial, IP65



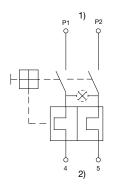
# **Diagrams**

2-pole, 1 bimetal, illuminated

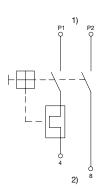


1) Line, 2) Load Codepos AAA = C12, C14, C17, C18, C19

2-pole, 2 bimetal, illuminated

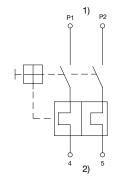


1) Line, 2) Load Codepos AAA = C32, C34, C37, C38, C39 2-pole, 1 bimetal, non illuminated



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

2-pole, 2 bimetal, non illuminated



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

The keys  $\slash$  codepos are listed in the key table of the basic function for selection.

Approval		Rated current	Rated voltage AC	Rated voltage DC
c <b>FLI</b> °us	UL 1077	0.0520 A	240 V	60 V
c <b>FL</b> °us	CSA C22.2 235	0.0520 A	240 V	60 V
Ď <sup>V</sup> E	IEC 60934	0.0520 A	240 V	60 V
(*)	GB 17701	0.0520 A	240 V	60 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

# 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

Configuration key В G R W Χ Υ

Configuration key

F

Н

K

L

М

- 0

NO PFI

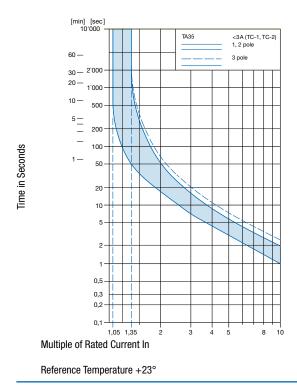
NO FF

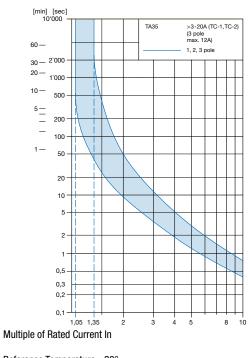
- 0

- 0

TA35 - CBD B F 120 CO - CZMXX = Rated current

#### **Time-Current-Curves**





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 - <b>CBD</b> B F 120 CO - CZMXX <b>= Basic function</b>	l	Rocker colour	
Basic function	Configuration key	Black	
2-pole, 1 bimetal, illuminated 240 V	C12	Green	
2-pole, 1 bimetal, illuminated 120 V	C14	Red	
2-pole, 1 bimetal, illuminated 24 V	C17	White	
2-pole, 1 bimetal, illuminated 12 V	C18	Orange	
2-pole, 1 bimetal, illuminated 5 V	C19	Yellow	
2-pole, 2 bimetal, illuminated 240 V	C32		
2-pole, 2 bimetal, illuminated 120 V	C34	TA35 - CBD B $\mathbf{F}$ 120 C0 - CZMXX =	: Legend
2-pole, 2 bimetal, illuminated 24 V	C37	Legend	
2-pole, 2 bimetal, illuminated 12 V	C38	Legend	
2-pole, 2 bimetal, illuminated 5 V	C39		_
2-pole, 2 bimetal, without illumination	CBD	embossed	Ŀ
2-pole, 1 bimetal, without illumination	CBT		
2-pole, 2 bimetal, momentary switch, without illumination	CED	white printed	ē
2-pole, 1 bimetal, momentary switch, without illumination	CET		_
		black printed	Ē
TA35 - CBD <b>B</b> F 120 C0 - CZMXX <b>= Rocker colour</b>		State printed	
Rocker colour	Configuration key	white printed	
Clear transparent	1	Made and a	Г
Red transparent	3	black printed	Ŀ
Green transparent	4		
Orange transparent	6	TA35 - CRD R F <b>120</b> CO - CZMXX -	– Datad a

Blue transparent

Rated current	Configuration key
without thermal overload protection / temporarily without VDE approval	COO
0.05 A	Z05
0.1 A	J0
0.2 A	J02
0.3 A	J03
0.4 A	J04
0.5 A	J05
0.8 A	J08
1.0 A	J1(
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
A 0.8	080
10.0 A	100
12.0 A	120
13.0 A	130

Configuration key
450
150
160
180
200
Configuration key
CO

Factory mounted accessories	Configuration key
Without cover	
Transparent cover, IP65	CZM21
Raised collar with transparent cover, IP65	CZM23
Raised collar, IP40	CZM24
Transparent cover antibacterial, IP65	CZM25

For subsequent fitting accessories see:

 $http://www.schurter.com/pdf/english/typ\_TA35\_Accessories.pdf$ 

# **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 trans- parent 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

Basic function Order Number Rocker colour Legend Rated current Accessories Config. Code

Most Popular.

A vailability for all products can be searched real-time: https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER

**Packaging Unit** 

10 Pcs

#### **Accessories**

Description



TA35 Accessories Screw-on collar with cover, IP65

information. All content is subject to modifications and amendments. Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability and test each

product selected for their own applications.