# TA35 Rocker 1 Pole

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
- VDE Certificate Number: IEC 60934
- UL File Number: UL 1077
- CSA File Number: CSA C22.2 235
- GB Standard: GB 17701

## Applications

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

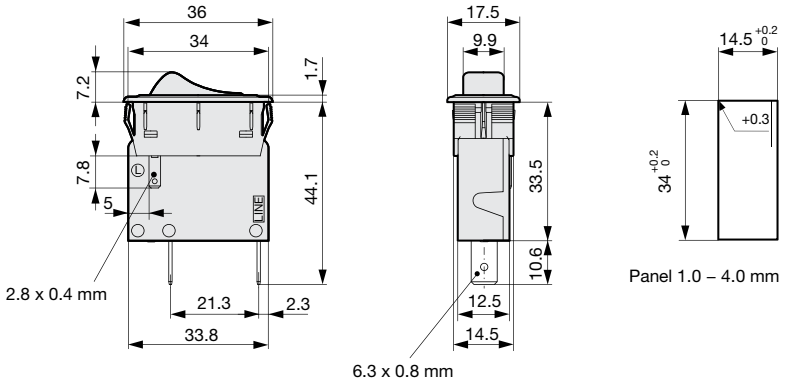
## Weblinks

pdf-datasheet, html-datasheet, General Product Information, Approvals, CE declaration of conformity, RoHS, CHINA-RoHS, REACH, e-Shop, SCHURTER-Stock-Check, Distributor-Stock-Check, Detailed request for product, Product News

## Technical Data

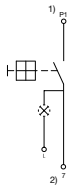
| | |
|---|---|
| Rated Voltage AC | 240 V; 50/60 Hz |
| Rated Voltage DC | 32 V |
| Rated current range AC | 0.05 - 20 A |
| Conditional short circuit capacity | 0.05...20 A: 2 kA, SC (C1) @ 240 VAC |
| Degree of Protection | from front side IP 40 acc. to IEC 60529 |
| Dielectric Strength | 50 Hz: > 2.5 kV<br>Impulse 1.2/50 µs: > 4 kV |
| Insulation resistance | 500 VDC > 100 MΩ |
| Endurance typical | mechanical: 50'000 switching cycles |
| | AC: 1 x Ir, cos φ 0.6:<br>30'000 switching cycles |
| | DC: 1 x Ir, L/R = 2 - 3 ms:<br>50'000 switching cycles |
| Overload | IEC: min. 40 trips<br>@ 6 x Ir, cos φ 0.6 |
| | UL / CSA: min. 50 trips<br>@ 1.5 x Ir, cos φ 0.75 |
| Ambient temperature | -30 °C to 60 °C |
| Vibration Resistance | ± 0.75 mm @ 10 - 60 Hz<br>acc. to IEC 60068-2-6, test Tc<br>10 G @ 60 - 500 Hz<br>acc. to IEC 60068-2-6, test Tc |
| Shock Resistance | 30 G / 18 ms<br>acc. to IEC 60068-2-27, test Ea |
| Tripping Type | Thermal |
| Actuation type | Rocker |
| Weight | 16.5 - 18.5 g |

## Dimension



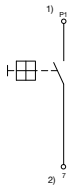
## Diagrams

1-pole, 0 bimetal, illuminated



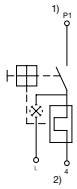
1) Line, 2) Load
Codepos AAA = CF2, CF4, CF7, CF8, CF9

1-pole, 0 bimetal, non illuminated



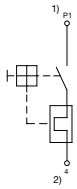
1) Line, 2) Load
Codepos AAA = CFC, CGC

1-pole, 1 bimetal, illuminated



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

1-pole, 1 bimetal, non illuminated



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

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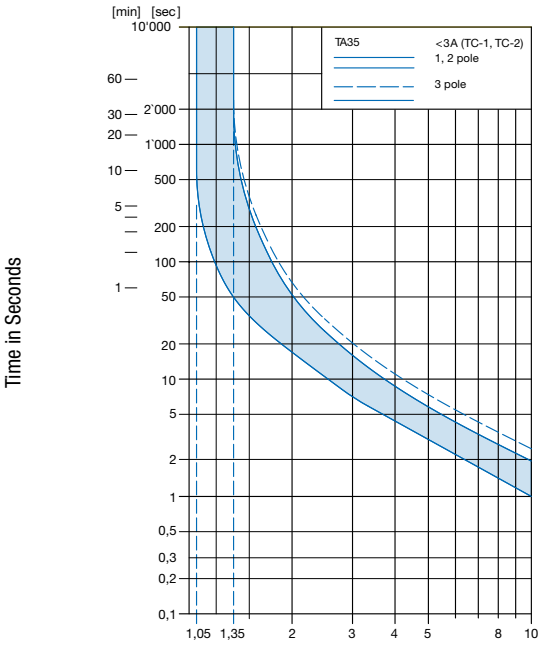
## Approvals

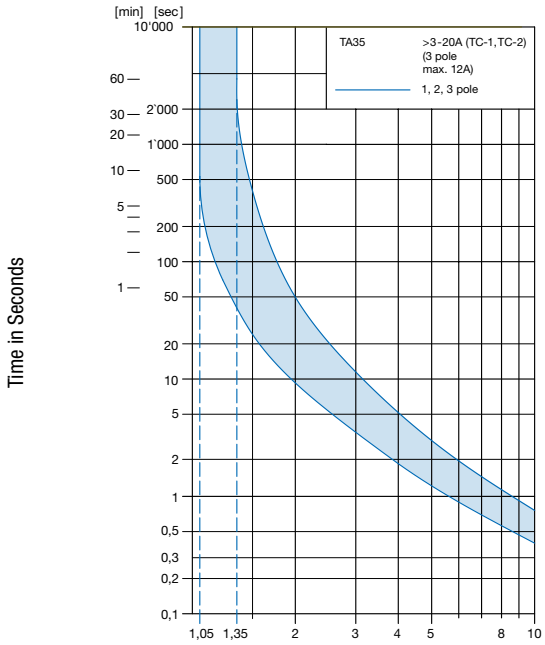
| Approval | | Rated current | Rated voltage AC | Rated voltage DC |
|---|---|---|---|---|
| c UL us | UL 1077 | 0.05...20 A | 240 V | 32 V |
| c UL us | CSA C22.2 235 | 0.05...20 A | 240 V | 32 V |
| VDE | IEC 60934 | 0.05...20 A | 240 V | 32 V |
| CCC | GB 17701 | 0.05...20 A | 240 V | 32 V |

## 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




## 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, whithout bimetal, illuminated 240 V | CF2 |
| 1-pole, whithout bimetal, illuminated 120 V | CF4 |
| 1-pole, whithout bimetal, illuminated 24 V | CF7 |
| 1-pole, whithout bimetal, illuminated 12 V | CF8 |
| 1-pole, whithout bimetal, illuminated 5 V | CF9 |
| 1-pole, whithout bimetal, without illumination | CFC |
| 1-pole, 1 bimetal, without illumination | CFT |
| 1-pole, whithout bimetal, momentary switch, without illumination | CGC |
| 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 |

| Rocker colour | Configuration key |
|---|---|
| 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 | – 0 | F |
| white printed | ON OFF | H |
| black printed | ON OFF | K |
| white printed | – 0 | L |
| black printed | – 0 | M |

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

| Rated current | Configuration key |
|---|---|
| without thermal overload protection | C00 |
| 0.05 A | Z05 |
| 0.1 A | J01 |
| 0.2 A | J02 |
| 0.3 A | J03 |
| 0.4 A | J04 |

Other rated currents on request

| Rated current | Configuration key |
|---|---|
| 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 |

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 |

| Basic function | Rocker colour | Legend | Rated current | Accessories | Config. Code | Order Number |
|---|---|---|---|---|---|---|
| 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 |
| 1-pole, whithout bimetal, without illumination | Black | white printed | without thermal overload protection | Without cover | TA35-CFCBLC00C0 | 4435.0007 |
| 1-pole, whithout bimetal, without illumination | Black | embossed | without thermal overload protection | Without cover | TA35-CFCBFC00C0 | 4435.0456 |

Most Popular.

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

**Packaging Unit** 20 Pcs

## Accessories

| | Description |
|---|---|
| | TA35 Accessories<br>Screw-on collar with cover, IP65 |

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