

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](#)

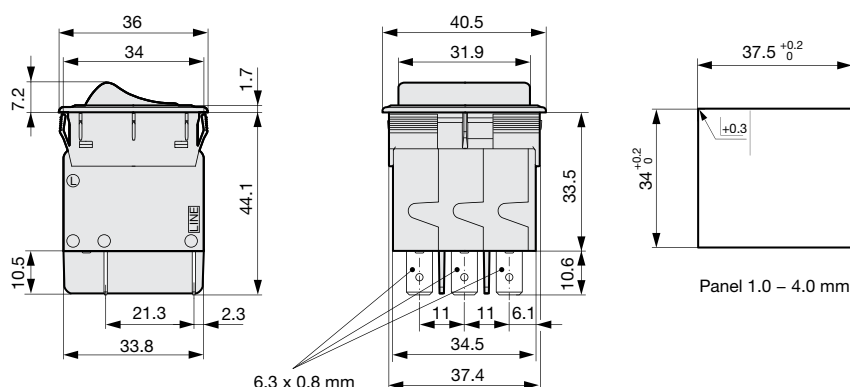
## Technical Data

|                                    |                                                                                                                                                         |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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<br>Impulse 1.2/50 $\mu$ s: > 4 kV                                                                                                        |
| Insulation resistance              | 500 VDC > 100 M $\Omega$                                                                                                                                |
| Endurance typical                  | mechanical: 50'000 switching cycles<br>AC: 1 x Ir, cos $\phi$ 0.6:<br>50'000 switching cycles<br>DC: 1 x Ir, L/R = 2 - 3 ms:<br>50'000 switching cycles |

|                      |                                                                                                                      |
|----------------------|----------------------------------------------------------------------------------------------------------------------|
| Overload             | IEC: min. 40 trips<br>@ 6 x Ir, cos $\phi$ 0.6<br>UL / CSA: min. 50 trips<br>@ 1.5 x Ir, cos $\phi$ 0.75             |
| Ambient temperature  | -30 °C to 60 °C                                                                                                      |
| Vibration Resistance | $\pm$ 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               | 43.0 - 45.0g                                                                                                         |

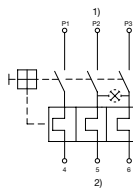
Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [General Product Information](#)

## Dimension



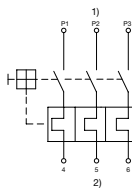
Diagrams

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

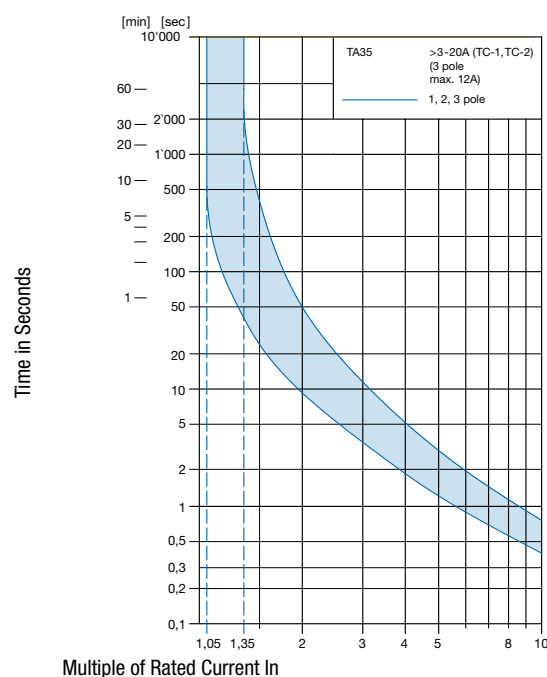
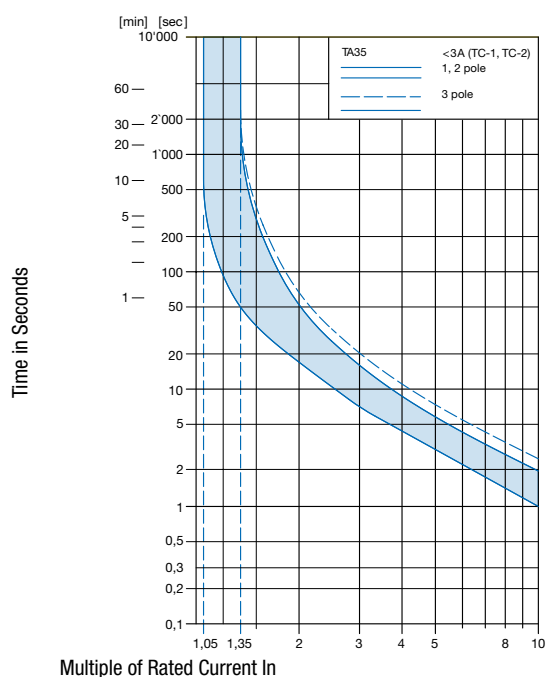
| Approval                                                                            |                  | Rated current | Rated voltage AC | Rated voltage DC |
|-------------------------------------------------------------------------------------|------------------|---------------|------------------|------------------|
|  US | UL 1077          | 0.05...12 A   | 415 Y/ 240 V     | -                |
|  US | CSA C22.2<br>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 [ $\Omega$ ] |
|-------------------|----------------------------------|
| 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                           |

TA35 Rocker 3-poles max. 12 A

## 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                      | 0.76              |
| -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

## 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, 3 bimetal, without illumination                   | CKD               |
| 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                 |

| 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      | 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               |

Other rated currents on request

## Rated current

| Rated current | Configuration key |
|---------------|-------------------|
| 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](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 | <a href="#">4435.0229</a> |
| 3-pole, 3 bimetal, without illumination | White           | embossed      | 3.0 A         | Without cover | TA35-CKDWF030C0 | <a href="#">4435.0025</a> |
| 3-pole, 3 bimetal, without illumination | Black           | white printed | 4.0 A         | Without cover | TA35-CKDBH040C0 | <a href="#">4435.0232</a> |
| 3-pole, 3 bimetal, without illumination | White           | embossed      | 5.0 A         | Without cover | TA35-CKDWF050C0 | <a href="#">4435.0044</a> |
| 3-pole, 3 bimetal, without illumination | Black           | white printed | 5.0 A         | Without cover | TA35-CKDBH050C0 | <a href="#">4435.0048</a> |
| 3-pole, 3 bimetal, without illumination | Black           | white printed | 6.0 A         | Without cover | TA35-CKDBH060C0 | <a href="#">4435.0233</a> |
| 3-pole, 3 bimetal, without illumination | White           | embossed      | 10.0 A        | Without cover | TA35-CKDWF100C0 | <a href="#">4435.0050</a> |
| 3-pole, 3 bimetal, without illumination | Black           | white printed | 10.0 A        | Without cover | TA35-CKDBH100C0 | <a href="#">4435.0235</a> |
| 3-pole, 3 bimetal, without illumination | White           | embossed      | 12.0 A        | Without cover | TA35-CKDWF120C0 | <a href="#">4435.0017</a> |
| 3-pole, 3 bimetal, illuminated 415 V    | Red transparent | white printed | 12.0 A        | Without cover | TA35-CD13L120C0 | <a href="#">4435.0414</a> |

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