

Circuit Breaker for Equipment thermal, Rocker actuation, 3 poles



See below:

Approvals and Compliances

Description

- Thermal circuit breaker
- 3-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

Weblinks

[pdf datasheet](#), [html-datasheet](#), [General Product Information](#), [Distributor-Stock-Check](#), [Detailed request for product](#), [Product News](#)

Technical Data

| | | | |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------|
| Rated Voltage AC | 415 Y / 240 V; 50/60 Hz | Overload | IEC: min. 40 trips @ 6 x I _r , cos φ 0.6 |
| Rated current range AC | 0.05 - 12 A | | UL / CSA: min. 50 trips @ 1.5 x I _r , cos φ 0.75 |
| Conditional short circuit capacity | 0.05...12 A: 2 kA @ 415 VAC | Ambient temperature | -30°C to 60°C |
| Degree of Protection | from front side IP 40 acc. to IEC 60529 | 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 |
| Dielectric Strength | 50Hz: > 2.5 kV Impulse 1.2/50 μs: > 4 kV | Shock Resistance | 30 G / 18ms acc. to IEC 60068-2-27, test Ea |
| Insulation Resistance | 500VDC > 100 MΩ | Tripping Type | Thermal |
| Lifetime | 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 | Actuation Type | Rocker |
| | | Weight | 43.0 - 45.0g |

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 |
|---------------|-------------------------------|--------------------|------------------------------------------|
| | VDE Approvals | VDE | VDE Certificate Number: 40019754 |
| | UL Approvals | UL | UL File Number: E71572 |
| | CQC Approvals | CQC | CCC Certificate Number: 2013010307598660 |

Product standards

Product standards that are referenced

| Organization | Design | Standard | Description |
|----------------------------------------------------------------------------------|-----------------------|-------------------|-----------------------------------------------------------------------|
|  | Designed according to | IEC 60934 | Circuit-breakers for equipment (CBE) |
|  | Designed according to | UL 1077 | Standard for Supplementary Protectors for Use in Electrical Equipment |
|  | Designed according to | CSA C22.2 No. 235 | Supplementary Protectors |
|  | Designed according to | GB 17701 | Circuit-breaker for equipment |





Application standards

Application standards where the product can be used

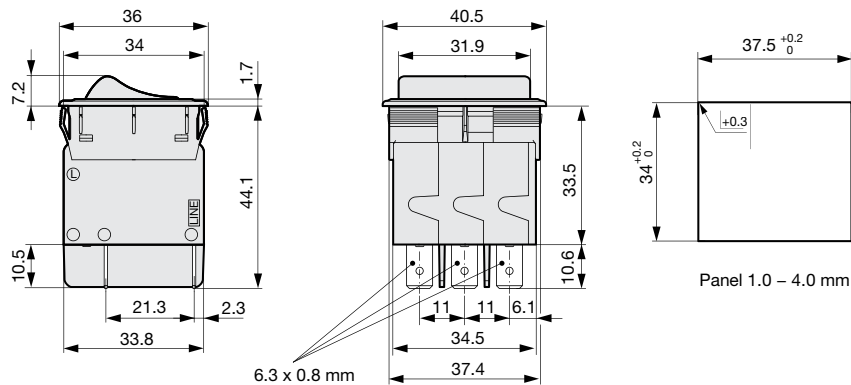
| Organization | Design | Standard | Description |
|----------------------------------------------------------------------------------|--------------------------------|--------------|-------------------------------------------------------------------------------------------------|
|  | Designed for applications acc. | IEC/UL 60950 | IEC 60950-1 includes the basic requirements for the safety of information technology equipment. |

Compliances

The product complies with following Guide Lines

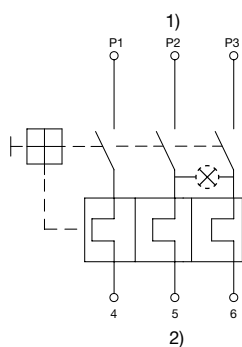
| Identification | Details | Initiator | Description |
|------------------------------------------------------------------------------------|------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | 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 | SCHURTER AG | EU Directive RoHS 2011/65/EU |
|  | 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 | 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]



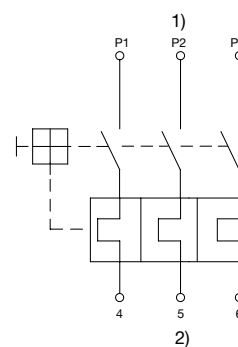
Diagrams

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 |
|-----------------------------------------------------------------------------------|------------------|---------------|------------------|------------------|
|  | 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

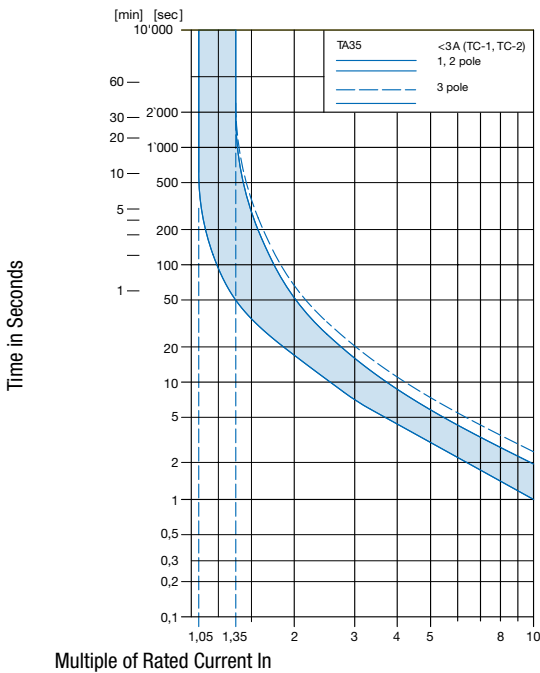
Effect of ambient temperature

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:

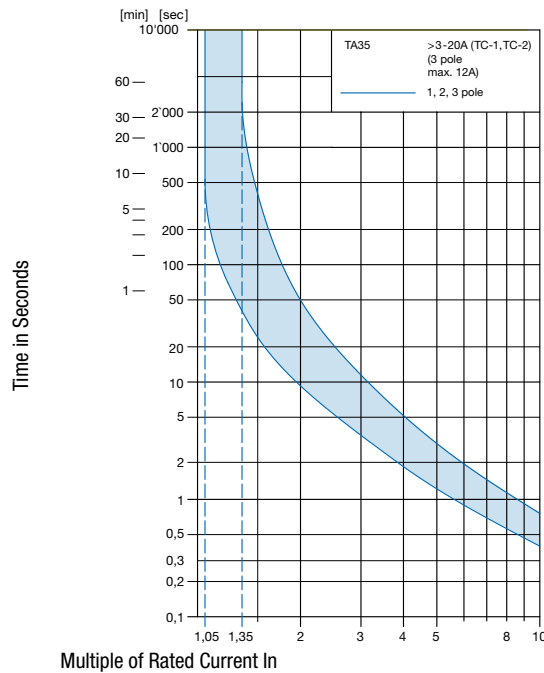
| Ambient temperature [°C] | Correction factor |
|--------------------------|-------------------|
| -30 | 0.76 |
| -20 | 0.81 |
| 0 | 0.90 |
| +23 | 1.00 |
| +40 | 1.06 |
| +50 | 1.10 |
| +60 | 1.14 |

Example: Rated current = 5 A; Environmental temperature = 50 °C; --> Correction factor = 1.10; Resulting current = 5.2 A --> Found 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, 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 |
| 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

| Legend | Configuration key |
|---------------|------------------------------------------------------------|
| embossed | <input type="checkbox"/> <input type="checkbox"/> F |
| white printed | <input type="checkbox"/> ON <input type="checkbox"/> OFF H |
| black printed | <input type="checkbox"/> ON <input type="checkbox"/> OFF K |
| white printed | <input type="checkbox"/> <input type="checkbox"/> L |
| black printed | <input type="checkbox"/> <input type="checkbox"/> 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 |

Other rated currents on request

| Rated current | Configuration key |
|---------------|-------------------|
| 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.com/pdf/english/typ_TA35_Accessories.pdf

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 |

Most Popular.

Availability 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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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[4435.0015](#) [4435.0016](#) [4435.0017](#) [4435.0018](#) [4435.0025](#) [4435.0026](#) [4435.0027](#) [4435.0043](#) [4435.0044](#) [4435.0045](#)
[4435.0048](#) [4435.0065](#) [4435.0066](#) [4435.0068](#) [4435.0071](#) [4435.0072](#) [4435.0095](#) [4435.0109](#) [4435.0111](#) [4435.0252](#)
[4435.0119](#) [4435.0122](#) [4435.0146](#) [4435.0148](#) [4435.0166](#) [4435.0167](#) [4435.0226](#) [4435.0227](#) [4435.0228](#) [4435.0229](#)
[4435.0231](#) [4435.0232](#) [4435.0233](#) [4435.0234](#) [4435.0235](#) [4435.0236](#) [4435.0251](#) [4435.0285](#) [4435.0286](#) [4435.0288](#)
[4435.0280](#) [4435.0230](#) [4435.0110](#) [4435.0050](#)