

## 阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

## Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

Circuit Breaker for Equipment thermal, 2 pole, Rocker actuation



### Description

- Thermal circuit breaker
- 1 or 2 pole thermal overload protection
- Positively trip-free release
- High configurability
- Rocker non-illuminated or illuminated
- Snap-in version
- Quick connect terminal 6.3 x 0.8 mm or screw clamp terminal M3.5 x 6 mm (lineside P1, P2)

### Approvals

- Approval Reference Type: TA45
- IEC Standard: IEC 60934
- UL Standard: UL 1077
- CSA Standard: CSA C22.2 No. 235
- GB Standard: GB 17701

### Applications

- Power tools
- Industrial appliances
- Power supplies

### 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   |
| Rated Voltage DC                   | 60 V  |
| Rated current range AC             | 0.05 - 20 A   |
| Conditional short circuit capacity | IEC: Inc, PC1, AC 240 V: 1 kA                       |
| Degree of Protection               | from front side IP 40 acc. to IEC 60529             |
| Dielectric Strength                | 4 kVAC  |
| Insulation Resistance              | 500VDC > 100 MΩ                                     |
| Endurance typical                  | mechanical: 50'000 switching cycles                 |
|                                    | AC: 1 x I <sub>r</sub> :<br>50'000 switching cycles |
|                                    | DC: 1 x I <sub>r</sub> :<br>50'000 switching cycles |

|                      |   |
|----------------------|---|
| Overload             | AC: min. 40trips<br>@ 6 x I <sub>r</sub>  |
|                      | DC: min. 40trips<br>@ 4 x I <sub>r</sub>  |
| Ambient temperature  | -10°C to 55°C   |
| Vibration Resistance | ± 0.75 mm @ 5 - 60 Hz<br>acc. to IEC 60068-2-6, test Fc<br>10 G @ 60 - 500 Hz<br>acc. to IEC 60068-2-6, test Fc |
| Shock Resistance     | 30 G / 18ms<br>acc. to IEC 60068-2-27, test Ea  |
| Tripping Type        | Thermal   |
| Actuation Type       | Rocker  |
| Weight               | 30 - 35g  |

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

**Dimension [mm]**

Quick connect terminal



A) Quick connect terminal, IEC 61210, A6.3-0.8 mm

Screw clamp terminal



B) Screw type M3, 5x6 (Philips Form H), maximum torque 1 Nm

**Accessories / factory mounted**

AZM01 / Collar with cover, IP 54



AZM02 / Raised collar with cover, narrow, IP 54

AZM03 / Raised collar, IP 40

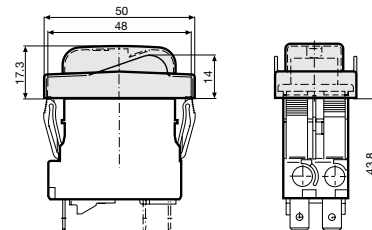


AZM10 / Collar with cover, narrow, IP 54

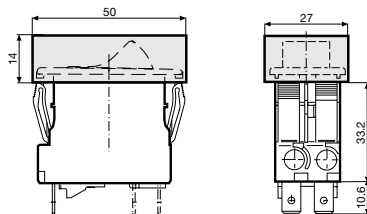


AZM11 / Partially raised collar with cover, narrow, IP 54

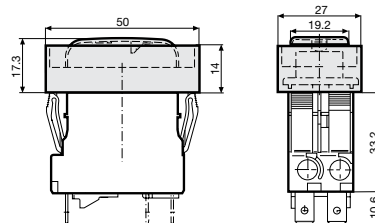
AZM12 / Partially raised collar without cover, narrow, IP 40



AZM13 / Raised collar narrow, IP40



AZM14 / Raised collar with cover narrow, IP 54



**Cut-out and pin-out**

Cut-out snap-in type

Pin-out



- 1) Assemble
- 2) edge must be sharp

**Diagrams**

1 pole thermal overload protection



1 pole thermal overload protection, Shunt terminal



2 pole thermal overload protection



2 pole thermal overload protection, Shunt terminal



**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:

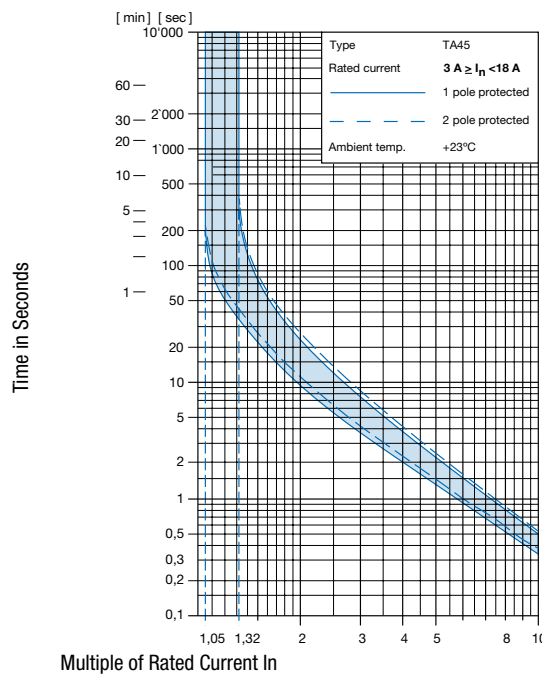
| Ambient temperature [°C] | Correction factor |
|--------------------------|-------------------|
| -10                      | 0.89              |
| -5                       | 0.91              |
| 0                        | 0.92              |
| +23                      | 1.00              |
| +30                      | 1.03              |
| +40                      | 1.08              |
| +55                      | 1.16              |

Example: Rated current = 5 A; Environmental temperature = 40 °C; --> Correction factor = 1.08; Resulting current = 5.5 A --> Fount to next higher rated current: 6 A

**Time-Current-Curves**



Reference Temperature +23°



Reference Temperature +23°



## Config. Code

TA45 - AK2 W F 120 A2 - AZM11

The characters are placeholders for the correspondingly keys of selections from the key tables.

TA45 - **AK2** W F 120 A2 - AZM11 = Basic function

| Basic function  | Configuration key | Basic function   | Configuration key |
|---|-------------------|--|-------------------|
| 2-pole, rocker, 1pole overload protection, flat connection, illuminated 220 V...240 V                 | A12               | 2-pole, rocker, 2pole overload protection, flat connection, illuminated 4 V...7 V                      | A39               |
| 2-pole, rocker, 1pole overload protection, flat connection, illuminated 110 V...120 V                 | A14               | 2-pole, rocker, 2pole overload protection, shunt terminal, flat connection, illuminated 220 V...240 V  | A42               |
| 2-pole, rocker, 1pole overload protection, flat connection, illuminated 20 V...26 V                   | A17               | 2-pole, rocker, 2pole overload protection, shunt terminal, flat connection, illuminated 110 V...120 V  | A44               |
| 2-pole, rocker, 1pole overload protection, flat connection, illuminated 10 V...13 V                   | A18               | 2-pole, rocker, 2pole overload protection, shunt terminal, flat connection, illuminated 20 V...26 V    | A47               |
| 2-pole, rocker, 1pole overload protection, flat connection, illuminated 4 V...7 V                     | A19               | 2-pole, rocker, 2pole overload protection, shunt terminal, flat connection, illuminated 10 V...13 V    | A48               |
| 2-pole, rocker, 1pole overload protection, shunt terminal, flat connection, illuminated 220 V...240 V | A22               | 2-pole, rocker, 2pole overload protection, shunt terminal, flat connection, illuminated 4 V...7 V      | A49               |
| 2-pole, rocker, 1pole overload protection, shunt terminal, flat connection, illuminated 110 V...120 V | A24               | 2-pole, rocker, 1pole overload protection, screw connection, illuminated 220 V...240 V                 | A62               |
| 2-pole, rocker, 1pole overload protection, shunt terminal, flat connection, illuminated 20 V...26 V   | A27               | 2-pole, rocker, 1pole overload protection, screw connection, illuminated 110 V...120 V                 | A64               |
| 2-pole, rocker, 1pole overload protection, shunt terminal, flat connection, illuminated 10 V...13 V   | A28               | 2-pole, rocker, 1pole overload protection, screw connection, illuminated 20 V...26 V                   | A67               |
| 2-pole, rocker, 1pole overload protection, shunt terminal, flat connection, illuminated 4 V...7 V     | A29               | 2-pole, rocker, 1pole overload protection, screw connection, illuminated 10 V...13 V                   | A68               |
| 2-pole, rocker, 2pole overload protection, flat connection, illuminated 220 V...240 V                 | A32               | 2-pole, rocker, 1pole overload protection, screw connection, illuminated 4 V...7 V                     | A69               |
| 2-pole, rocker, 2pole overload protection, flat connection, illuminated 110 V...120 V                 | A34               | 2-pole, rocker, 1pole overload protection, shunt terminal, screw connection, illuminated 220 V...240 V | A72               |
| 2-pole, rocker, 2pole overload protection, flat connection, illuminated 20 V...26 V                   | A37               | 2-pole, rocker, 1pole overload protection, shunt terminal, screw connection, illuminated 110 V...120 V | A74               |
| 2-pole, rocker, 2pole overload protection, flat connection, illuminated 10 V...13 V                   | A38               | 2-pole, rocker, 1pole overload protection, shunt terminal, screw connection, illuminated 20 V...26 V   | A77               |
|   |                   | 2-pole, rocker, 1pole overload protection, shunt terminal, screw connection, illuminated 10 V...13 V   | A78               |

| Basic function  | Configuration key |
|---|-------------------|
| 2-pole, rocker, 1pole overload protection, shunt terminal, screw connection, illuminated 4 V...7 V                  | A79               |
| 2-pole, rocker, 2pole overload protection, screw connection, illuminated 220 V...240 V                              | A82               |
| 2-pole, rocker, 2pole overload protection, screw connection, illuminated 110 V...120 V                              | A84               |
| 2-pole, rocker, 2pole overload protection, screw connection, illuminated 20 V...26 V                                | A87               |
| 2-pole, rocker, 2pole overload protection, screw connection, illuminated 10 V...13 V                                | A88               |
| 2-pole, rocker, 2pole overload protection, screw connection, illuminated 4 V...7 V                                  | A89               |
| 2-pole, rocker, 2pole overload protection, shunt terminal, screw connection, illuminated 220 V...240 V              | A92               |
| 2-pole, rocker, 2pole overload protection, shunt terminal, screw connection, illuminated 110 V...120 V              | A94               |
| 2-pole, rocker, 2pole overload protection, shunt terminal, screw connection, illuminated 20 V...26 V                | A97               |
| 2-pole, rocker, 2pole overload protection, shunt terminal, screw connection, illuminated 10 V...13 V                | A98               |
| 2-pole, rocker, 2pole overload protection, shunt terminal, screw connection, illuminated 4 V...7 V                  | A99               |
| 2-pole, rocker, 2pole overload protection, flat connection, without illumination                                    | ABD               |
| 2-pole, rocker, 1pole overload protection, shunt terminal, flat connection, without illumination                    | ABF               |
| 2-pole, rocker, 2pole overload protection, shunt terminal, flat connection, without illumination                    | ABG               |
| 2-pole, rocker, 1pole overload protection, flat connection, without illumination                                    | ABT               |
| 2-pole, rocker, 2pole overload protection, flat connection, momentary switch, without illumination                  | AED               |
| 2-pole, rocker, 1pole overload protection, shunt terminal, flat connection, momentary switch, without illumination  | AEF               |
| 2-pole, rocker, 2pole overload protection, shunt terminal, flat connection, momentary switch, without illumination  | AEG               |
| 2-pole, rocker, 1pole overload protection, flat connection, momentary switch, without illumination                  | AET               |
| 2-pole, rocker, 2pole overload protection, screw connection, without illumination                                   | AHD               |
| 2-pole, rocker, 1pole overload protection, shunt terminal, screw connection, without illumination                   | AHF               |
| 2-pole, rocker, 2pole overload protection, shunt terminal, screw connection, without illumination                   | AHG               |
| 2-pole, rocker, 1pole overload protection, screw connection, without illumination                                   | AHT               |
| 2-pole, rocker, 2pole overload protection, screw connection, momentary switch, without illumination                 | AJD               |
| 2-pole, rocker, 1pole overload protection, shunt terminal, screw connection, momentary switch, without illumination | AJF               |
| 2-pole, rocker, 2pole overload protection, shunt terminal, screw connection, momentary switch, without illumination | AJG               |
| 2-pole, rocker, 1pole overload protection, screw connection, momentary switch, without illumination                 | AJT               |

TA45 - AK2 **W** F 120 A2 - AZM11 = Actuator colour

| Actuator colour    | Configuration key |
|--------------------|-------------------|
| Clear transparent  | 1                 |
| Red transparent    | 3                 |
| Green transparent  | 4                 |
| Orange transparent | 6                 |
| Black              | B                 |
| Green              | G                 |
| Red                | R                 |

| Actuator colour | Configuration key |
|-----------------|-------------------|
| White           | W                 |
| Orange          | X                 |
| Yellow          | Y                 |

TA45 - AK2 **W** **F** 120 A2 - AZM11 = Legend

| Legend        | Configuration key   |
|---------------|---|
| embossed      |  F   |
| white printed |  H   |
| black printed |  K   |
| white printed |  L   |
| black printed |  M   |
| white printed |  P   |
| black printed |  R |
| white printed |  S |
| black printed |  T |

TA45 - AK2 **W** **F** **120** A2 - AZM11 = Rated current

| Rated current | Configuration key |
|---------------|-------------------|
| 0.05 A        | Z05               |
| 0.1 A         | J01               |
| 0.2 A         | J02               |
| 0.3 A         | J03               |
| 0.4 A         | J04               |
| 0.5 A         | J05               |
| 0.6 A         | J06               |
| 0.7 A         | J07               |
| 0.8 A         | J08               |
| 0.9 A         | J09               |
| 1.0 A         | J10               |
| 1.1 A         | J11               |
| 1.2 A         | J12               |
| 1.3 A         | J13               |
| 1.4 A         | J14               |
| 1.5 A         | J15               |
| 1.6 A         | J16               |
| 1.7 A         | J17               |
| 1.8 A         | J18               |

Other rated currents on request

| Rated current | Configuration key |
|---------------|-------------------|
| 1.9 A         | J19               |
| 2.0 A         | J20               |
| 2.1 A         | J21               |
| 2.2 A         | J22               |
| 2.3 A         | J23               |
| 2.5 A         | J25               |
| 2.8 A         | J28               |
| 3.0 A         | 030               |
| 3.5 A         | 035               |
| 4.0 A         | 040               |
| 4.5 A         | 045               |
| 5.0 A         | 050               |
| 6.0 A         | 060               |
| 6.5 A         | 065               |
| 7.0 A         | 070               |
| 7.5 A         | 075               |
| 8.0 A         | 080               |
| 9.0 A         | 090               |
| 10.0 A        | 100               |
| 11.0 A        | 110               |
| 12.0 A        | 120               |
| 13.0 A        | 130               |
| 14.0 A        | 140               |
| 15.0 A        | 150               |
| 16.0 A        | 160               |
| 17.0 A        | 170               |

Other rated currents on request

| Rated current | Configuration key |
|---------------|-------------------|
| 18.0 A        | 180               |
| 19.0 A        | 190               |
| 20.0 A        | 200               |

Other rated currents on request

TA45 - AK2 W F 120 **A2** - AZM11 = Release / lock-out latch

| Release / lock-out latch          | Configuration key |
|-----------------------------------|-------------------|
| whithout release / lock-out latch | C0                |

TA45 - AK2 W F 120 A2 - **AZM11** = Accessories

| Factory mounted accessories                        | Configuration key |
|--|-------------------|
| Without cover                                      |                   |
| Collar with cover, IP54                            | AZM01             |
| Raised collar with cover, IP54                     | AZM02             |
| Raised collar, IP40                                | AZM03             |
| Raised collar with cover narrow, IP54              | AZM10             |
| Partially raised collar with cover, narrow, IP54   | AZM11             |
| Partially raised collarwithout cover, narrow, IP40 | AZM12             |
| Raised collar narrow, IP40                         | AZM13             |
| Raised collar with cover narrow, IP54              | AZM14             |

For subsequent fitting accessories see:

[http://www.schurter.com/pdf/english/typ\\_TA45-ACC.pdf](http://www.schurter.com/pdf/english/typ_TA45-ACC.pdf)

## Variants

| Thermal overload protection | Addition | connection type        | Illumination         | Actuator colour | Legend        | Rated current | Accessories   | Config. Code    | Order Number |
|-----------------------------|----------|------------------------|----------------------|-----------------|---------------|---------------|---------------|-----------------|--------------|
| 1-pole                      |          | Quick connect terminal | without illumination | White           | embossed      | 10.0 A        | Without cover | TA45-ABTWF100C0 | 4430.0022    |
| 2-pole                      |          | Quick connect terminal | without illumination | Black           | white printed | 15.0 A        | Without cover | TA45-ABDBL150C0 | 4430.1089    |
| 2-pole                      |          | Quick connect terminal | without illumination | Black           | white printed | 15.0 A        | Without cover | TA45-ABDBS150C0 | 4430.1328    |

Most Popular.

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

**Packaging Unit** 1 Pcs



## Accessories

### Description



TA45-ACC  
Accessories to TA45

---