

# Over current switch, 2A, 2 p, type B characteristic, DC

Part no. FAZ-B2/2-DC Article no. 176075



Similar to illustration

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| , ,   |    |    |                                |
|---|----|----|--------------------------------|
| Basic function                                  |    |    | Miniature circuit breakers     |
| Number of poles                                 |    |    | 2 pole                         |
| Tripping characteristic                         |    |    | В                              |
| Application                                     |    |    | Switchgear for DC applications |
| Rated current                                   | In | Α  | 2                              |
| Rated switching capacity acc. to IEC/EN 60947-2 |    | kA | 10                             |
| Product range                                   |    |    | FAZ-DC                         |

## **Technical data**

#### Electrical

| switching capacity acc. to IEC/EN 60947-2 |
|---|
|---|

### **Design verification as per IEC/EN 61439**

| lesign verification as per IEC/EN 61439   |                   |    |  |
|---|-------------------|----|--|
| echnical data for design verification   |                   |    |  |
| Rated operational current for specified heat dissipation  | In                | Α  | 2  |
| Heat dissipation per pole, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Equipment heat dissipation, current-dependent   | P <sub>vid</sub>  | W  | 2.8  |
| Static heat dissipation, non-current-dependent  | P <sub>vs</sub>   | W  | 0  |
| Heat dissipation capacity   | P <sub>diss</sub> | W  | 0  |
| Operating ambient temperature min.  |                   | °C | -40  |
| Operating ambient temperature max.  |                   | °C | 75   |
|   |                   |    | linear, per +1 °C, results in a 0.5% reduction of current carrying capacity  |
| C/EN 61439 design verification  |                   |    |  |
| 10.2 Strength of materials and parts  |                   |    |  |
| 10.2.2 Corrosion resistance   |                   |    | Meets the product standard's requirements.   |
| 10.2.3.1 Verification of thermal stability of enclosures  |                   |    | Meets the product standard's requirements.   |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat  |                   |    | Meets the product standard's requirements.   |
| 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects $$ |                   |    | Meets the product standard's requirements.   |
| 10.2.4 Resistance to ultra-violet (UV) radiation  |                   |    | Meets the product standard's requirements.   |
| 10.2.5 Lifting  |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.2.6 Mechanical impact  |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.2.7 Inscriptions   |                   |    | Meets the product standard's requirements.   |
| 10.3 Degree of protection of ASSEMBLIES   |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.4 Clearances and creepage distances  |                   |    | Meets the product standard's requirements.   |
| 10.5 Protection against electric shock  |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.6 Incorporation of switching devices and components  |                   |    | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.7 Internal electrical circuits and connections   |                   |    | Is the panel builder's responsibility.   |
| 10.8 Connections for external conductors  |                   |    | Is the panel builder's responsibility.   |
| 10.9 Insulation properties  |                   |    |  |
| 10.9.2 Power-frequency electric strength  |                   |    | Is the panel builder's responsibility.   |
| 10.9.3 Impulse withstand voltage  |                   |    | Is the panel builder's responsibility.   |
| 10.9.4 Testing of enclosures made of insulating material  |                   |    | Is the panel builder's responsibility.   |
| 10.10 Temperature rise  |                   |    | The panel builder is responsible for the temperature rise calculation. Eaton wi provide heat dissipation data for the devices. |

| 10.11 Short-circuit rating          | Is the panel builder's responsibility. The specifications for the switchgear must be observed.           |
|-------------------------------------|--|
| 10.12 Electromagnetic compatibility | Is the panel builder's responsibility. The specifications for the switchgear must be observed.           |
| 10.13 Mechanical function           | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. |

## **Technical data ETIM 6.0**

Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01 [AAB905011])

| Release characteristic Ruber of poles (total) Number of poles (total) Number of protected poles | [AAB905011])   |   |    |         |
|---|--|---|----|---------|
| Number of protected poles         2           Nominal rated current         A         2           Nominal rated voltage         V         440           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         kA         0           Rated short-circuit breaking capacity Icn EN 60898 at 400 V         kA         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         kA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         kA         10           Voltage type         DC         DC           Current limiting class         3         3           Frequency         No         No           Concurrently switching N-neutral         No         No           Suitable for flush-mounted installation         No         3           Over voltage category         2         3           Pollution degree         2         2           Width in number of modular spacings         2         2           Built-in depth         mm         70.5           Additional equipment possible         Wes         Yes   | Release characteristic   |   |    | В       |
| Nominal rated current  Nominal rated voltage  Nominal rated voltage  Rated short-circuit breaking capacity Icn EN 60898 at 230 V  Rated short-circuit breaking capacity Icn EN 60898 at 400 V  Rated short-circuit breaking capacity Icn EN 60898 at 400 V  Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V  Voltage type  Current limiting class  Frequency  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible   | Number of poles (total)  |   |    | 2       |
| Nominal rated voltage  Rated short-circuit breaking capacity Icn EN 60898 at 230 V  Rated short-circuit breaking capacity Icn EN 60898 at 400 V  Rated short-circuit breaking capacity Icn EN 60898 at 400 V  Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V  Voltage type  Current limiting class  Frequency  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible   | Number of protected poles                                      |   |    | 2       |
| Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Current limiting class Current limiting class Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible  KA  0  0  0  0  0  0  0  0  0  0  0  0  0  | Nominal rated current  | A | 4  | 2       |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type  Current limiting class  Frequency  Concurrently switching N-neutral  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  kA  10  10  10  10  10  10  10  10  10  1  | Nominal rated voltage  | V | 1  | 440     |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V  | Rated short-circuit breaking capacity Icn EN 60898 at 230 V    | k | :A | 0       |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V  Voltage type  Current limiting class  Frequency  Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  KA  10  COC  DC  COC  DC  DC  3  Frequency  No  No  Suitable for flush-mounted installation  No  2  Suitable for flush-mounted installation  No  To  To  To  To  To  To  To  To  To  | Rated short-circuit breaking capacity Icn EN 60898 at 400 V    | k | :A | 0       |
| Voltage typeDCCurrent limiting class3FrequencyHz50 - 60Concurrently switching N-neutralNoSuitable for flush-mounted installationNoOver voltage category3Pollution degree2Width in number of modular spacings2Built-in depthmm70.5Additional equipment possibleYes   | Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | k | :A | 10      |
| Current limiting class  Frequency Concurrently switching N-neutral Concurrently switching N-neutral No Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible  3  7  8  9  9  9  9  9  9  9  9  9  9  9  9   | Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | k | :A | 10      |
| Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible  Hz 50 - 60 No No  2  No No No  3  2  4  7  7  7  7  7  7  7  7  7  7  7  7  | Voltage type   |   |    | DC      |
| Concurrently switching N-neutral No Suitable for flush-mounted installation No Over voltage category 3 Pollution degree 2 Width in number of modular spacings 2 Built-in depth mm 70.5 Additional equipment possible Yes  | Current limiting class   |   |    | 3       |
| Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  No  2  Voltage category  3  2  Voltage category  70.5  Yes  | Frequency  | Н | łz | 50 - 60 |
| Over voltage category     3       Pollution degree     2       Width in number of modular spacings     2       Built-in depth     mm     70.5       Additional equipment possible     Yes   | Concurrently switching N-neutral                               |   |    | No      |
| Pollution degree 2 Width in number of modular spacings 2 Built-in depth mm 70.5 Additional equipment possible Yes   | Suitable for flush-mounted installation                        |   |    | No      |
| Width in number of modular spacings 2  Built-in depth mm 70.5  Additional equipment possible Yes  | Over voltage category  |   |    | 3       |
| Built-in depth mm 70.5 Additional equipment possible Yes  | Pollution degree   |   |    | 2       |
| Additional equipment possible  Yes  | Width in number of modular spacings                            |   |    | 2       |
|   | Built-in depth   | m | nm | 70.5    |
| Degree of protection (IP)   | Additional equipment possible                                  |   |    | Yes     |
|   | Degree of protection (IP)                                      |   |    | IP20    |