

#### Over current switch, 13A, 1Np, B-Char, AC

Part no. FAZ-B13/1N Article no. 278646 Catalog No. FAZ-B13/1N



Similar to illustration

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|---|----|----|--|
| Basic function                                  |    |    | Miniature circuit breakers                                     |
| Number of poles                                 |    |    | 1 pole+N   |
| Tripping characteristic                         |    |    | В  |
| Application                                     |    |    | Switchgear for industrial and advanced commercial applications |
| Rated current                                   | In | Α  | 13   |
| Rated switching capacity acc. to IEC/EN 60947-2 |    | kA | 15   |
| Product range                                   |    |    | FAZ  |

#### **Technical data**

#### **Electrical**

| Standards                                       |                |         | IEC/EN 60947-2<br>IEC/EN 60898 |
|---|----------------|---------|--------------------------------|
| Rated operational voltage                       | U <sub>e</sub> | V       |                                |
|   | U <sub>e</sub> | V AC    | 230/400                        |
|   |                | V DC    | 48 (per pole)                  |
| Rated switching capacity acc. to IEC/EN 60947-2 |                | kA      | 15                             |
| Operational switching capacity                  |                | kA      | 7.5                            |
| Characteristic                                  |                |         | B, C, D                        |
| Max. back-up fuse                               |                | A gL/gG | 125                            |
| Selectivity Class                               |                |         | 3                              |
| Lifespan  | Operations     |         | > 10000                        |
| Direction of incoming supply                    |                |         | as required                    |
| Mechanical                                      |                |         |                                |
| Others desired from the discountries.           |                |         | AE.                            |

| Mechanical                   |                 |   |
|------------------------------|-----------------|---|
| Standard front dimension     | mm              | 45                                      |
| Enclosure height             | mm              | 80                                      |
| Terminal protection          |                 | Finger and back-of-hand proof to BGV A2 |
| Mounting width per pole      | mm              | 17.5                                    |
| Mounting                     |                 | IEC/EN 60715 top-hat rail               |
| Degree of Protection         |                 | IP20, IP40 (when fitted)                |
| Terminals top and bottom     |                 | Twin-purpose terminals                  |
| Terminal capacities          | mm <sup>2</sup> |   |
|                              | mm <sup>2</sup> | 1 x 25                                  |
|                              | mm <sup>2</sup> | 2 x 10                                  |
| Thickness of busbar material | mm              | 0.8 2                                   |
| Mounting position            |                 | As required                             |

# Design verification as per IEC/EN 61439

| Technical data for design verification                   |                   |    |     |
|--|-------------------|----|-----|
| Rated operational current for specified heat dissipation | In                | Α  | 13  |
| Heat dissipation per pole, current-dependent             | P <sub>vid</sub>  | W  | 0   |
| Equipment heat dissipation, current-dependent            | P <sub>vid</sub>  | W  | 2.9 |
| Static heat dissipation, non-current-dependent           | $P_{vs}$          | 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 will 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.                         |

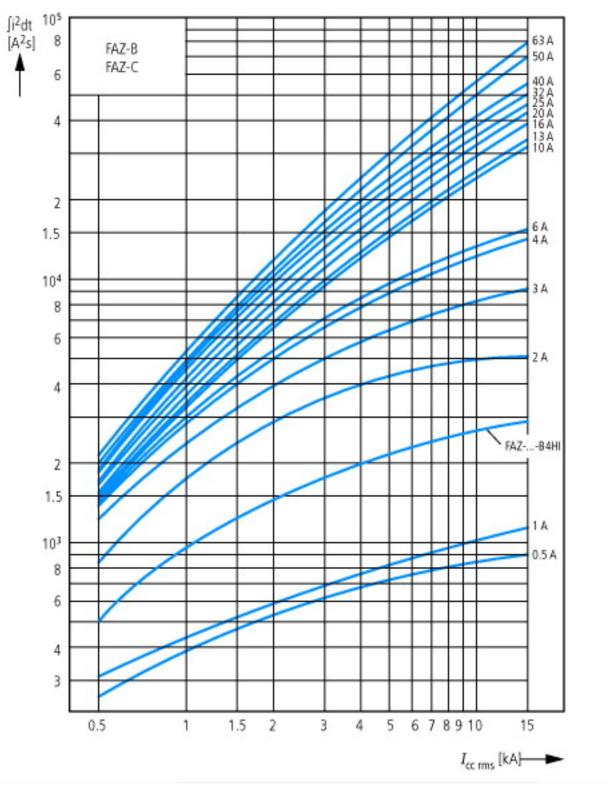
## **Technical data ETIM 6.0**

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

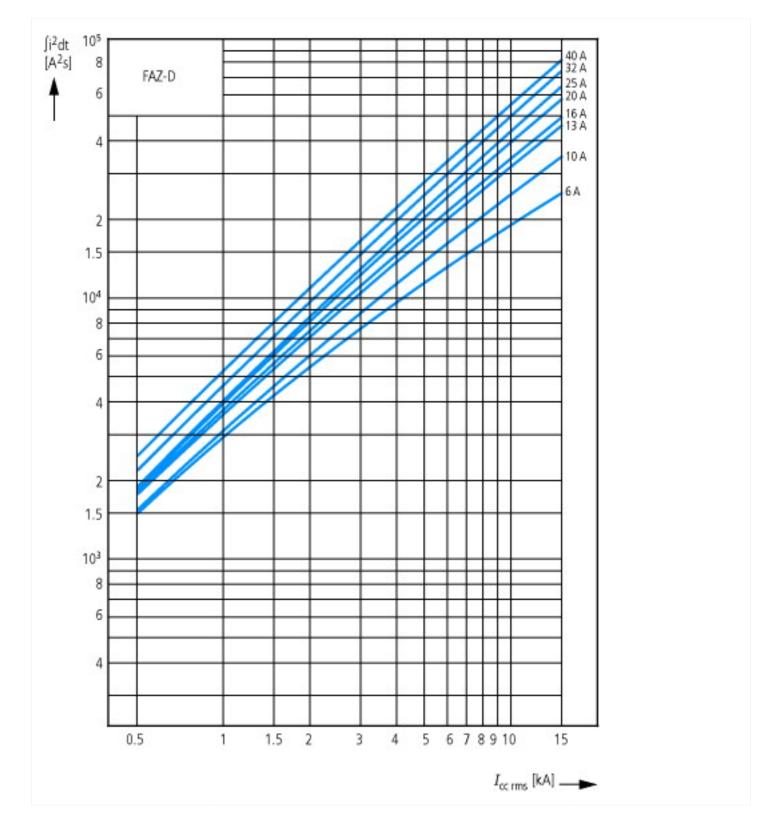
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01 [AAB905011])

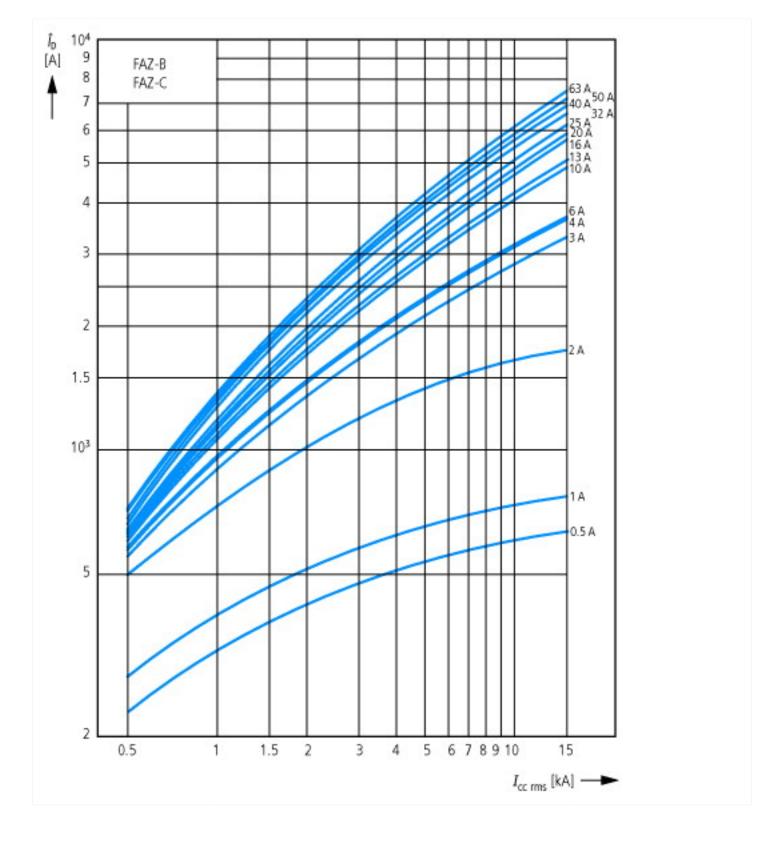
| Release characteristic   |    | В       |
|--|----|---------|
| Number of poles (total)  |    | 2       |
| Number of protected poles                                      |    | 2       |
| Nominal rated current  | А  | 13      |
| Nominal rated voltage  | V  | 230     |
| Rated short-circuit breaking capacity Icn EN 60898 at 230 V    | kA | 10      |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V    | kA | 10      |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | kA | 15      |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | kA | 15      |
| Voltage type   |    | AC      |
| Current limiting class   |    | 3       |
| Frequency  | Hz | 50 - 60 |
| Concurrently switching N-neutral                               |    | Yes     |
| 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     |
| Degree of protection (IP)                                      |    | IP20    |

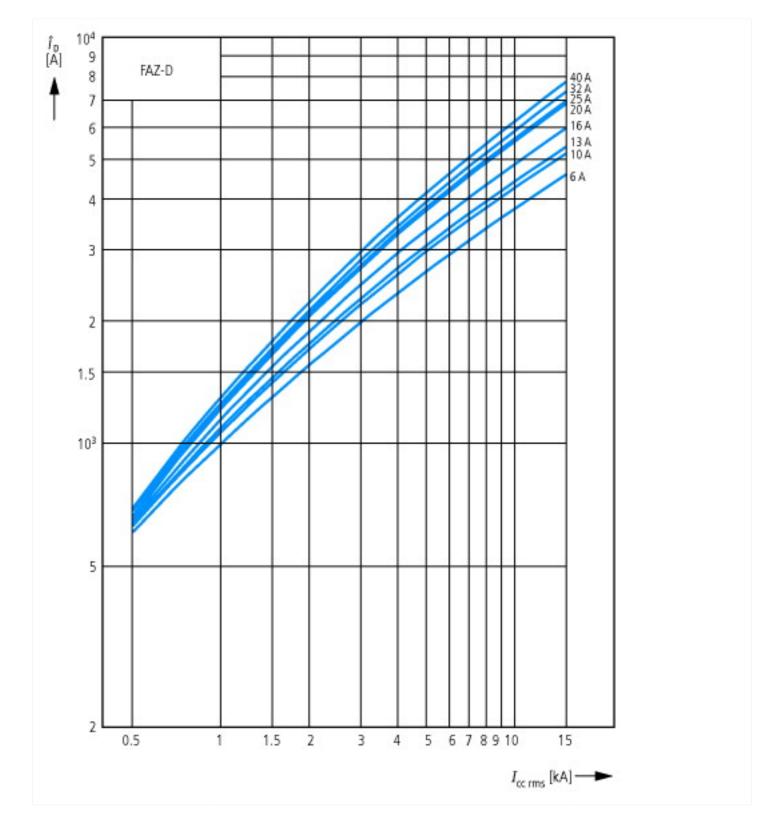
## **Characteristics**

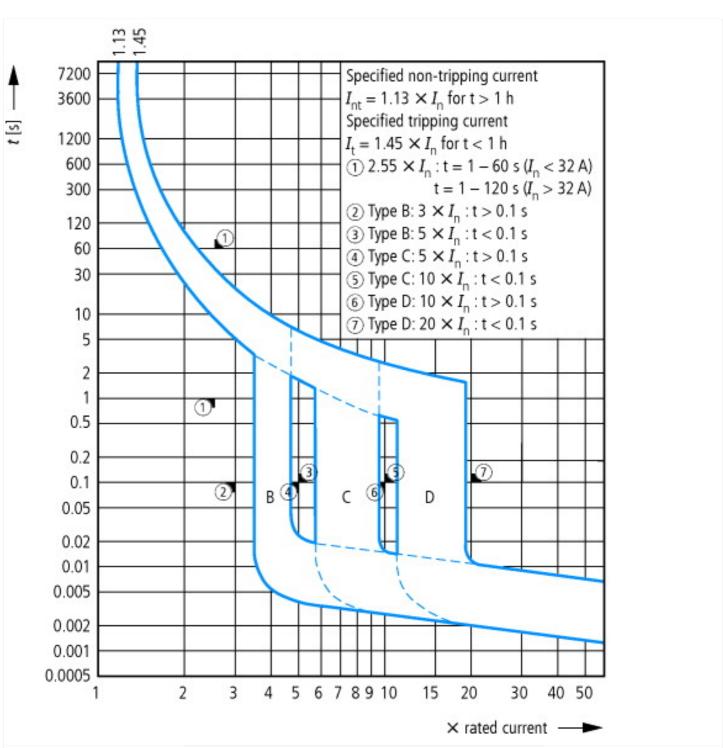


Let-through energy I<sup>2</sup>t According to IEC/EN 60898

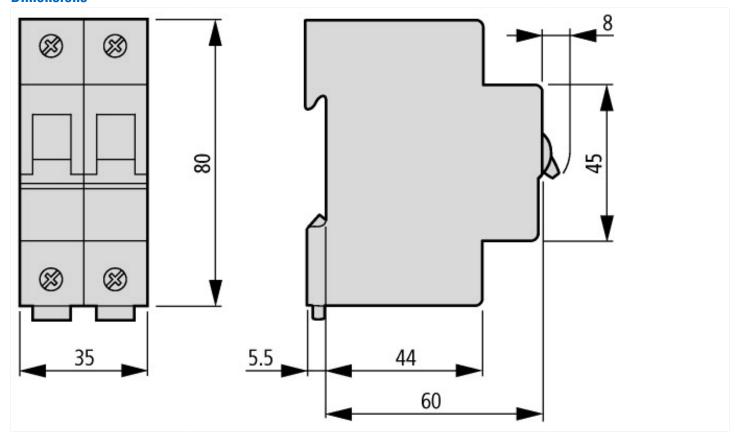








## **Dimensions**



## **Additional product information (links)**

AWA1220-1755 Circiut-breaker

AWA1220-1755 Circiut-breaker

ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/17550701.pdf