



Similar to illustration

# Delivery programme

| Basic function                                  |                |    | Miniature circuit breakers                                     |
|---|----------------|----|--|
| Number of poles                                 |                |    | 4 pole   |
| Tripping characteristic                         |                |    | C  |
| Application                                     |                |    | Switchgear for industrial and advanced commercial applications |
| Rated current                                   | I <sub>n</sub> | А  | 1.6  |
| Rated switching capacity acc. to IEC/EN 60947-2 |                | kA | 15   |
| Product range                                   |                |    | FAZ  |

## **Technical data**

| E | lectrica | al |
|---|----------|----|
| c | tandarde |    |

| Standards                                       |                |                 | IEC/EN 60947-2<br>IEC/EN 60898          |
|---|----------------|-----------------|---|
| Rated operational voltage                       | U <sub>e</sub> | V               |   |
|   | Ue             | 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                                      |                |                 |   |
| 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

| •  |                   |    |     |
|--|-------------------|----|-----|
| echnical data for design verification                    |                   |    |     |
| Rated operational current for specified heat dissipation | In                | А  | 1.6 |
| Heat dissipation per pole, current-dependent             | P <sub>vid</sub>  | W  | 0   |
| Equipment heat dissipation, current-dependent            | P <sub>vid</sub>  | W  | 6.4 |
| 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  |
|  |                   |    |     |

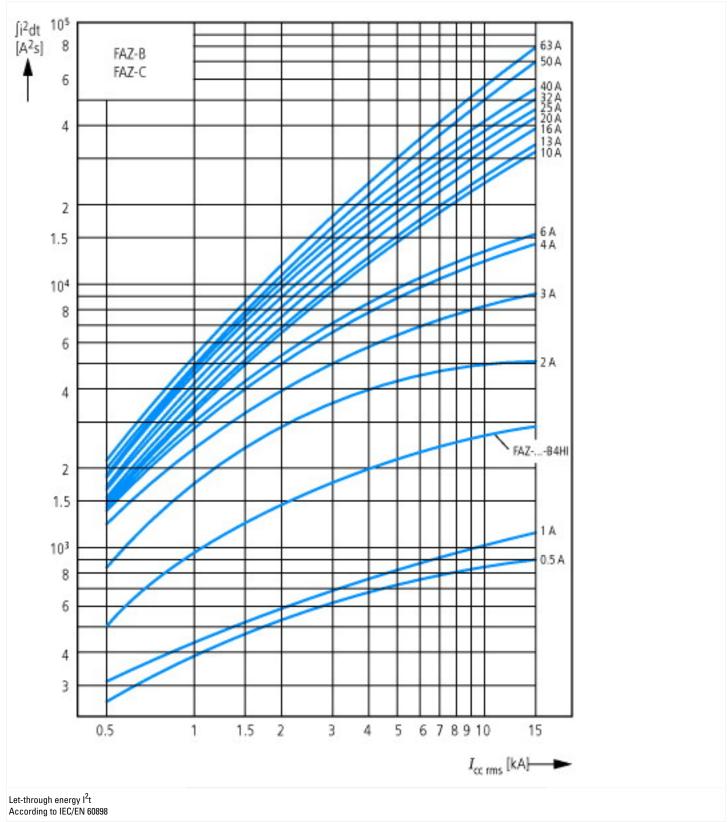
linear, per +1 °C, results in a 0.5% reduction of current carrying capacity

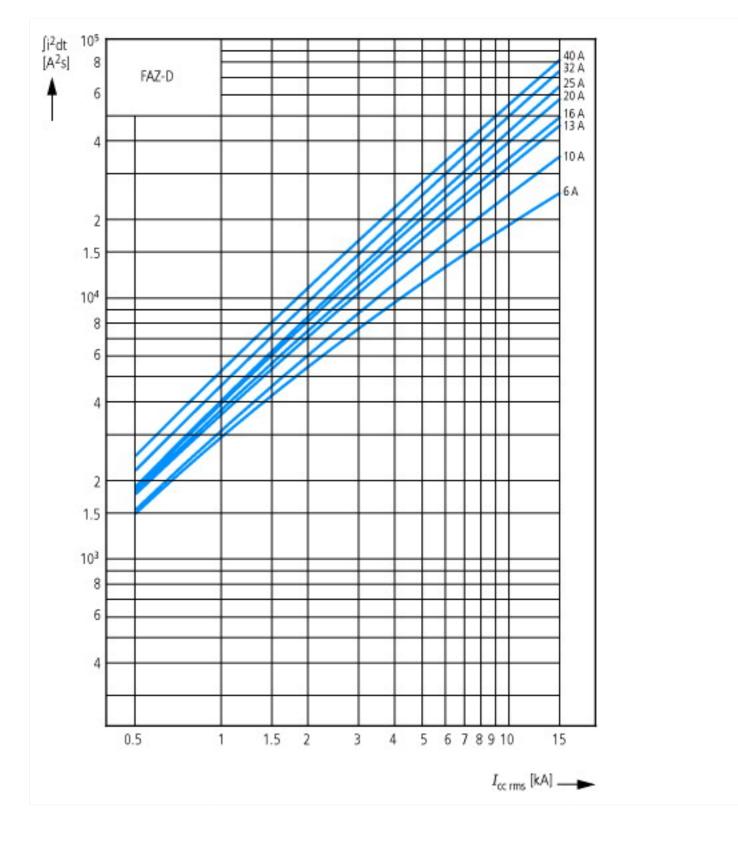
| C/EN 61439 design verification   |  |
|--|--|
| 10.2 Strength of materials and parts   |  |
| 10.2.2 Corrosion resistance  | Meets the product standard's requirements.   |
| 10.2.3.1 Verification of thermal stability of enclosures   | Meets the product standard's requirements.   |
| 10.2.3.2 Verification 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 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 observed.                                      |
| 10.12 Electromagnetic compatibility  | Is the panel builder's responsibility. The specifications for the switchgear must observed.                                      |
| 10.13 Mechanical function  | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

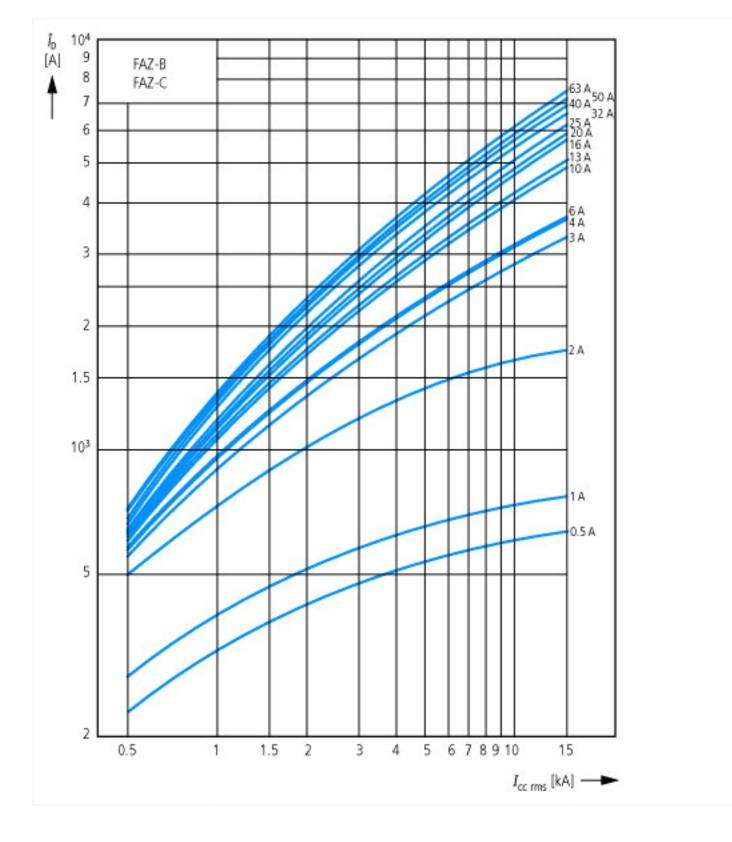
#### **Technical data ETIM 6.0**

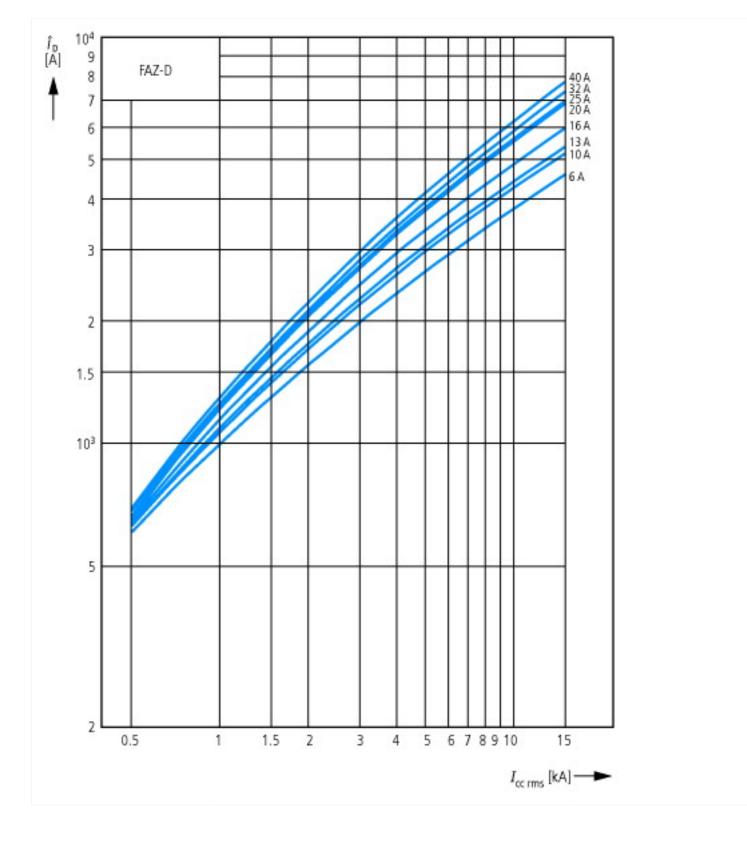
| Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)   | Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042) |                |  |  |
|--|--|----------------|--|--|
| Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01 [AAB905011]) |  |                |  |  |
| Release characteristic   |  | С              |  |  |
| Number of poles (total)  |  | 4              |  |  |
| Number of protected poles  |  | 4              |  |  |
| Nominal rated current  | А  | 1.6            |  |  |
| Nominal rated voltage  | V  | 400            |  |  |
| 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  |  | 4              |  |  |
| Built-in depth   | mm   | n <b>70</b> .5 |  |  |
| Additional equipment possible  |  | Yes            |  |  |
| Degree of protection (IP)  |  | IP20           |  |  |

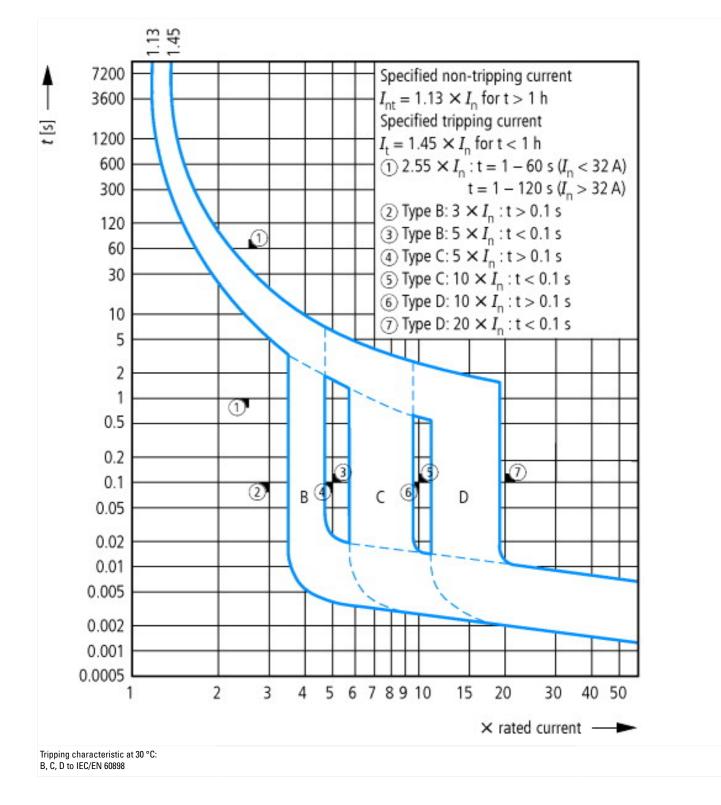




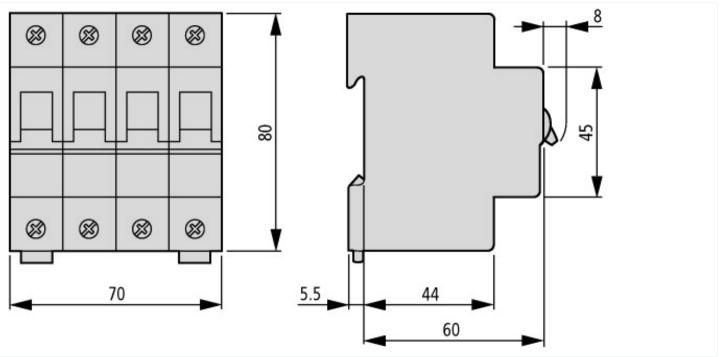








#### Dimensions



## Additional product information (links)

AWA1220-1755 Circiut-breaker

AWA1220-1755 Circiut-breaker

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