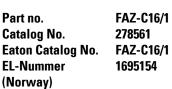


Miniature circuit breaker (MCB), 16A, 1p, C-Char, AC



FAZ-C16/1 278561 1695154



Similar to illustration

#### **Delivery program**

| Basic function                                  |    |    | Miniature circuit-breakers                                     |
|-------------------------------------------------|----|----|----------------------------------------------------------------|
| Number of poles                                 |    |    | 1 pole                                                         |
| Tripping characteristic                         |    |    | C                                                              |
| Application                                     |    |    | Switchgear for industrial and advanced commercial applications |
| Rated current                                   | In | А  | 16                                                             |
| Rated switching capacity acc. to IEC/EN 60947-2 |    | kA | 15                                                             |
| Product range                                   |    |    | FAZ                                                            |

#### **Technical data Flectrical**

| Refer     Field     Field <th< th=""><th>Electrical</th><th></th><th></th><th></th></th<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Electrical                                      |                |                 |                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------|-----------------|-----------------------------------------|
| Image: space s | Standards                                       |                |                 |                                         |
| Index space of the space of  | Rated operational voltage                       | U <sub>e</sub> | V               |                                         |
| Raded switching capacity acc. to IEC/EN 60947-2     K     K     K       Operational switching capacity     K     K     S       Characteristic     K     K     K       Selectivity Class     Y     K     S       Selectivity Class     Operational switching capacity     Y     S     S       Direction of incoming supply     Operational switching capacity     Y     S     S       Nechanical     Y     Y     S     S     S       Terminal protection     Y     Y     S     S     S       Mounting width per pole     Y     Y     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S       Rectand front dimension     Y     Y     Y     S     S     S     S     S     S     <                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                 | Ue             | V AC            | 240/415                                 |
| Appendix and set of the set  |                                                 |                | V DC            | 60 (per pole)                           |
| Characteristic Image: Provide Section of Sectio               | Rated switching capacity acc. to IEC/EN 60947-2 |                | kA              | 15                                      |
| Max. back-up tuseA gLygIsSelectivity ClassVerter3LifespanVerter> 1000Direction of incoming supplyVerter3WechanicalMarkMarkKechanicalMarkMarkEnclosure heightMarkMarkMounting width per poleMarkMarkMounting width per poleMarkMarkDirection of notationMarkMarkDirection for ControlMarkMarkDirection for ControlMarkMarkDirection for ControlMarkMarkDirection for ControlMarkMarkDirection for ControlMarkMarkDirection for ControlMarkMarkTerminal capacitiesMarkSalandamingTerminal capacitiesMarkSala                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Operational switching capacity                  |                | kA              | 7.5                                     |
| Selectivity Class     Aperations     Selectivity Class     Selecitity Class     Selectivity Class     S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Characteristic                                  |                |                 | B, C, D                                 |
| Lifespan Operations > 1000   Direction of incoming supply > required   Wechanical  se required   Standard front dimension  Mon   Enclosure height  Mon   Terminal protection  Mon   Mounting width per pole  Mon   Mounting   Ford Bork-of-hand proof to BGV A2   Degree of Protection   Ford Bork-of-hand proof to BGV A2   Terminal stop and bottom   Ford Bork-of-hand proof to BGV A2   Terminal capacities   Ford Bork-of-hand proof to BGV A2   Terminal capacities   Ford Bork-of-hand proof to BGV A2   Terminal capacities    Ford Bork-of-hand proof to BGV A2   Terminal capacities        Terminal capacities        Terminal capacities        Terminal capacities        Terminal capacities        Terminal capacities        Terminal cap                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Max. back-up fuse                               |                | A gL/gG         | 125                                     |
| Direction of incoming supply     is required       Vechanical     srequired       Standard front dimension     m     4       Enclosure height     m     8     3       Terminal protection     m     8     1     1       Mounting width per pole     m     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Selectivity Class                               |                |                 | 3                                       |
| Mechanical     mm     4       Standard front dimension     mm     4       Enclosure height     mm     8       Terminal protection     mm     1inger and back-of-hand proof to BGV A2       Mounting width per pole     mm     15.5       Degree of Protection     Freminals top and bottom     Freminals top and bottom     Freminals top and bottom     Freminals and bo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Lifespan                                        | Operations     |                 | > 10000                                 |
| Standard front dimensionmm45Enclosure heightmm80Terminal protectionMmFinger and back-of-hand proof to BGV A2Mounting width per polemm1.5MountingIC/EN 60715 top-hat railDegree of ProtectionICICTerminals top and bottommm²ini-purpose terminalsTerminal capacitiesmm²1.25Interminal capacitiesmm²1.25Interminals top and bottommm²1.25Interminal capacitiesmm²1.25Interminals top and bottommm²1.25Interminals top and bottommm² <td< td=""><td>Direction of incoming supply</td><td></td><td></td><td>as required</td></td<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Direction of incoming supply                    |                |                 | as required                             |
| Enclosure height   mm   80     Terminal protection   Finger and back-of-hand proof to BGV A2     Mounting width per pole   mm   1.5     Mounting   Finder Auf Stop-hat rail   1.5     Degree of Protection   Finder Auf Stop-hat rail   1.5     Terminal stop and bottom   Finder Auf Stop-hat rail   1.5     Terminal capacities   Finder Auf Stop-hat rail   1.5     Terminal capacities   Finder Auf Stop-hat rail   1.5     Interminal capacities   Finder Auf Stop Auf Stop-hat rail   1.5     Terminal capacities   Finder Auf Stop                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Mechanical                                      |                |                 |                                         |
| Terminal protectionImage and back-of-hand proof to BGV A2Mounting width per polemm7.5MountingImage and back-of-hand proof to BGV A2Image and back-of-hand proof to BGV A2Degree of ProtectionImage and back of hand proof to BGV A2Image and back-of-hand proof to BGV A2Terminals top and bottomImage and back of hand proof to BGV A2Image and back-of-hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand proof to BGV A2Image and back of hand proof to BGV A2Terminal capacitiesImage and back of hand pr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Standard front dimension                        |                | mm              | 45                                      |
| Mounting width per pole     mm     1.5       Mounting     IC/EN 60715 top-hat rail       Degree of Protection     IC/EN 60715 top-hat rail       Terminals top and bottom     IC/EN 60715 top-hat rail       Terminal capacities     Imm       Immediate     Immediate       Immediate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Enclosure height                                |                | mm              | 80                                      |
| Mounting   Image: Constraint of the sector                             | Terminal protection                             |                |                 | Finger and back-of-hand proof to BGV A2 |
| Degree of Protection P20, IP40 (when fitted)   Terminals top and bottom Twin-purpose terminals   Terminal capacities mm <sup>2</sup> Imm <sup>2</sup> 1x 25   Imm <sup>2</sup> 1x 10   Imm <sup>2</sup> 1x 25   Imm <sup>2</sup> 1x 10   Imm <sup>2</sup> 1x 10   Imm <sup>2</sup> 1x 25   Imm <sup>2</sup> 1x 10   Imm <sup>2</sup> 1x 10   Imm <sup>2</sup> 1x 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Mounting width per pole                         |                | mm              | 17.5                                    |
| Terminals top and bottom Image: Comparison of the sector               | Mounting                                        |                |                 | IEC/EN 60715 top-hat rail               |
| Terminal capacities mm <sup>2</sup> mm <sup>2</sup> 1x 25   mm <sup>2</sup> 2x 10   Thickness of busbar material mm 08 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Degree of Protection                            |                |                 | IP20, IP40 (when fitted)                |
| Image: Non-State Image: Non-State                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Terminals top and bottom                        |                |                 | Twin-purpose terminals                  |
| Image: market index  | Terminal capacities                             |                | mm <sup>2</sup> |                                         |
| Thickness of busbar material mm 0.8 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                 |                | mm <sup>2</sup> | 1 x 25                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                 |                | mm <sup>2</sup> | 2 x 10                                  |
| Mounting position As required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 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                | А | 16  |
| Heat dissipation per pole, current-dependent             | P <sub>vid</sub>  | W | 0   |
| Equipment heat dissipation, current-dependent            | P <sub>vid</sub>  | W | 2.2 |
| 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                                                      |
| EC/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)

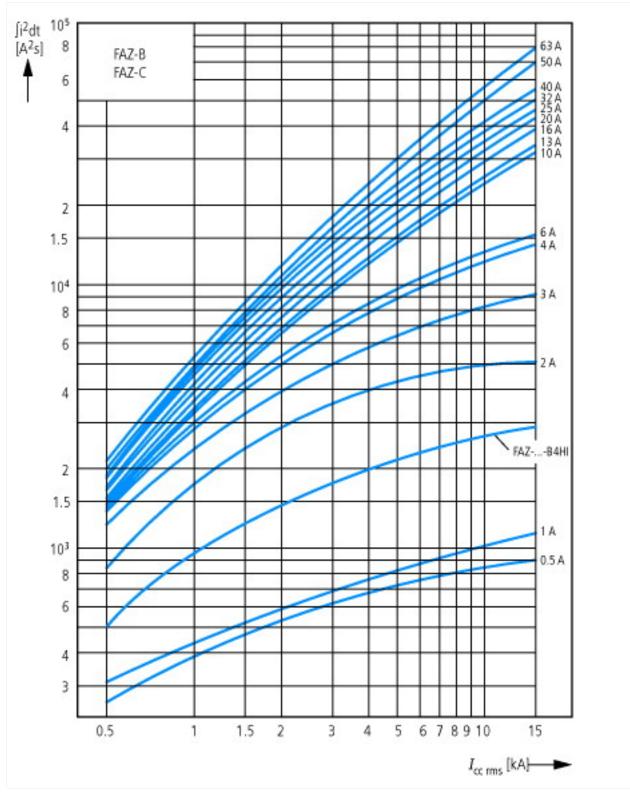
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01 [AAB905011])

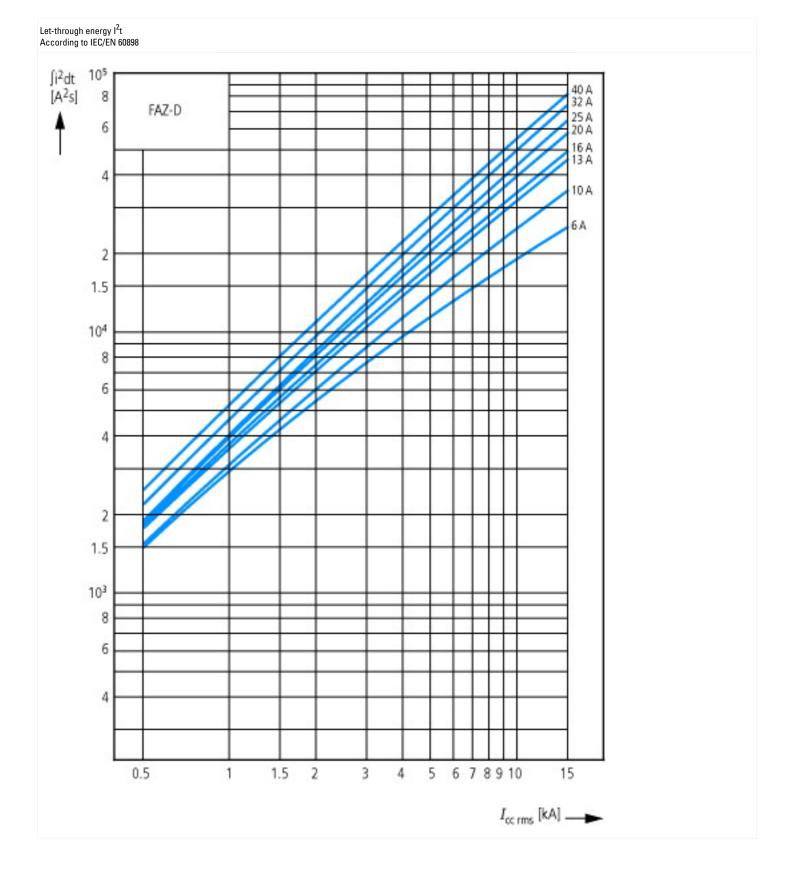
| Release characteristic                                         |    | C         |
|----------------------------------------------------------------|----|-----------|
| Number of poles (total)                                        |    | 1         |
| Number of protected poles                                      |    | 1         |
| Nominal rated current                                          | А  | 16        |
| Nominal rated voltage                                          | V  | 230       |
| Rated short-circuit breaking capacity Icn EN 60898 at 230 V    | kA | A 10      |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V    | kA | A 10      |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | kA | A 15      |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | kA | A 15      |
| Voltage type                                                   |    | AC        |
| Current limiting class                                         |    | 3         |
| Frequency                                                      | Hz | z 50 - 60 |
| Concurrently switching N-neutral                               |    | No        |
| Suitable for flush-mounted installation                        |    | No        |
| Over voltage category                                          |    | 3         |
| Pollution degree                                               |    | 2         |
| Width in number of modular spacings                            |    | 1         |
| Built-in depth                                                 | mn | nm 70.5   |
| Additional equipment possible                                  |    | Yes       |
| Degree of protection (IP)                                      |    | IP20      |
|                                                                |    |           |

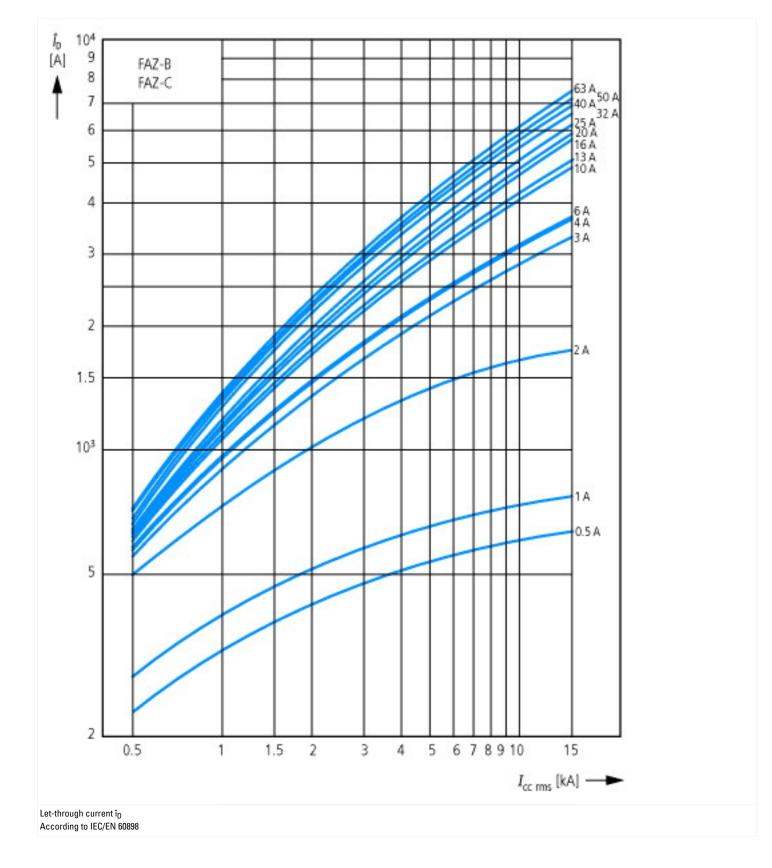
#### **Approvals**

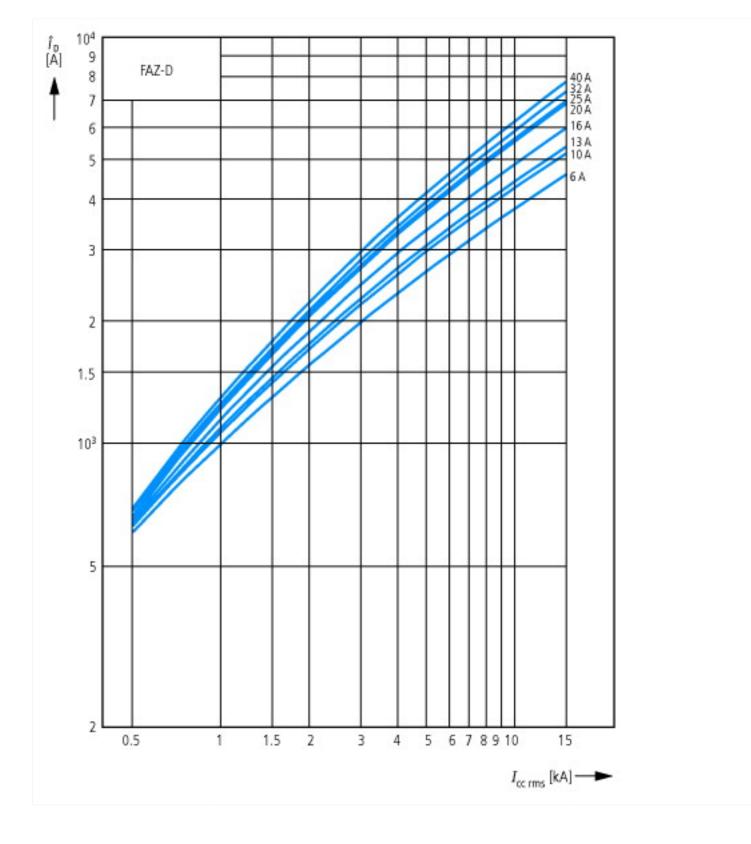
| Product Standards                | IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking |
|----------------------------------|----------------------------------------------------------------------|
| UL File No.                      | E177451                                                              |
| UL Category Control No.          | QVNU2, QVNU8                                                         |
| CSA File No.                     | 204453                                                               |
| CSA Class No.                    | 3215-30                                                              |
| North America Certification      | UL recognized, CSA certified                                         |
| Conditions of Acceptability      | Supplementary Protector only                                         |
| Suitable for                     | Branch Circuits; not as BCPD                                         |
| Current Limiting Circuit-Breaker | No                                                                   |
| Max. Voltage Rating              | 277 VAC; 48 VDC                                                      |
| Degree of Protection             | IEC: IP20; UL/CSA Type: -                                            |
|                                  |                                                                      |

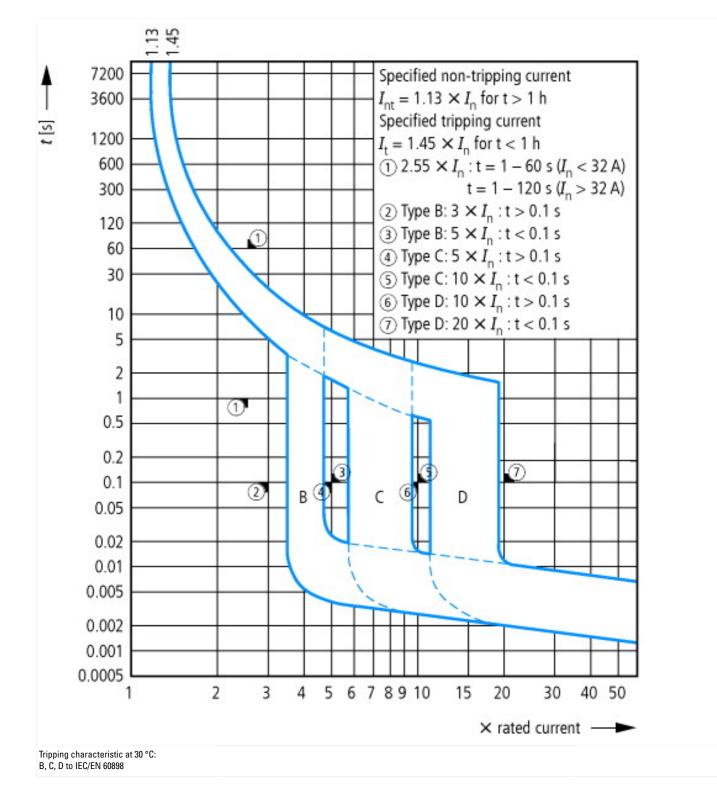
## **Characteristics**



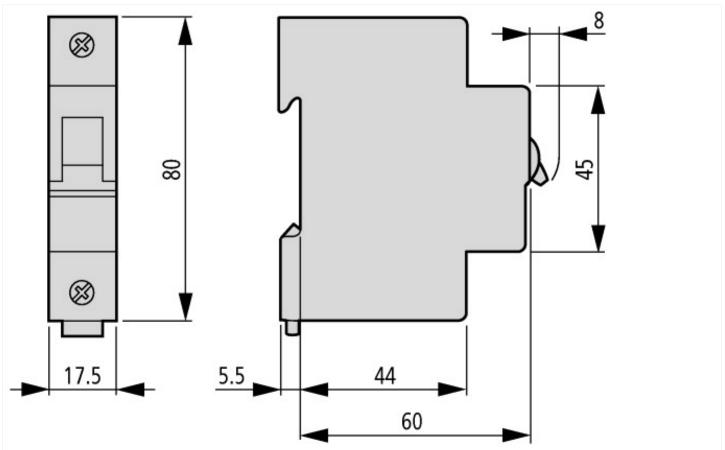








### Dimensions



# Additional product information (links)

### AWA1220-1755 Circiut-breaker

AWA1220-1755 Circiut-breaker

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