



**Miniature circuit breaker (MCB), 32 A, 3p, characteristic: C**



**Part no.** FAZ-C32/3  
**Catalog No.** 278876  
**Alternate Catalog No.** FAZ-C32/3  
**EL-Number (Norway)** 1695185

**Delivery program**

|   |          |    |  |
|---|----------|----|--|
| Basic function                                  |          |    | Miniature circuit-breakers                                     |
| Number of poles                                 |          |    | 3 pole   |
| Tripping characteristic                         |          |    | C  |
| Application                                     |          |    | Switchgear for industrial and advanced commercial applications |
| Rated current                                   | $I_n$    | A  | 32   |
| Rated switching capacity acc. to IEC/EN 60947-2 | $I_{cu}$ | kA | 15   |
| Product range                                   |          |    | FAZ  |

**Technical data**

**Electrical**

|   |          |            |                                |
|---|----------|------------|--------------------------------|
| Standards   |          |            | IEC/EN 60947-2<br>IEC/EN 60898 |
| Rated operational voltage   | $U_e$    | V          |                                |
|   | $U_e$    | V AC       | 240/415                        |
|   |          | V DC       | 60 (per pole)                  |
| Rated voltage according to UL   | $U_n$    | V AC       | 480Y/277                       |
| Rated switching capacity acc. to IEC/EN 60947-2   | $I_{cu}$ | kA         | 15                             |
| Breaking capacity according to UL   |          | kA         | 10 (UL1077)                    |
| Max operational voltage according to IEC/EN 60947-2   |          | V AC       | 440                            |
| Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)                      | $I_{cu}$ | kA         | 10                             |
| Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) | $I_{cs}$ |            | 7,5 kA                         |
| Rated voltage according to IEC/EN 60898-1   | $U_n$    | V AC       | 415                            |
| Rated switching capacity according to IEC/EN 60898-1  | $I_{cn}$ | kA         | 10                             |
| Rated service short-circuit breaking capacity according to IEC/EN 60898-1                           | $I_{cs}$ |            | 7,5 kA                         |
| Operational switching capacity  |          | kA         | 7.5                            |
| Characteristic  |          |            | B, C, D, K, S, Z               |
| Max. back-up fuse   |          | A gL/gG    | 125                            |
| Selectivity Class   |          |            | 3                              |
| lifespan  |          |            |                                |
|   | Lifespan | Operations | > 10000                        |
| Direction of incoming supply  |          |            | as required                    |

**Mechanical**

|                              |  |                 |   |
|------------------------------|--|-----------------|---|
| Standard front dimension     |  | mm              | 45                                      |
| Enclosure height             |  | mm              | 80                                      |
| 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 protection          |  |                 | Finger and back-of-hand proof to BGV A2 |
| 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   | $I_n$      | A  | 32   |
| Heat dissipation per pole, current-dependent   | $P_{vid}$  | W  | 0  |
| Equipment heat dissipation, current-dependent  | $P_{vid}$  | W  | 12.1   |
| Static heat dissipation, non-current-dependent   | $P_{vs}$   | W  | 0  |
| Heat dissipation capacity  | $P_{diss}$ | 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  |            |    |  |
| IEC/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 7.0

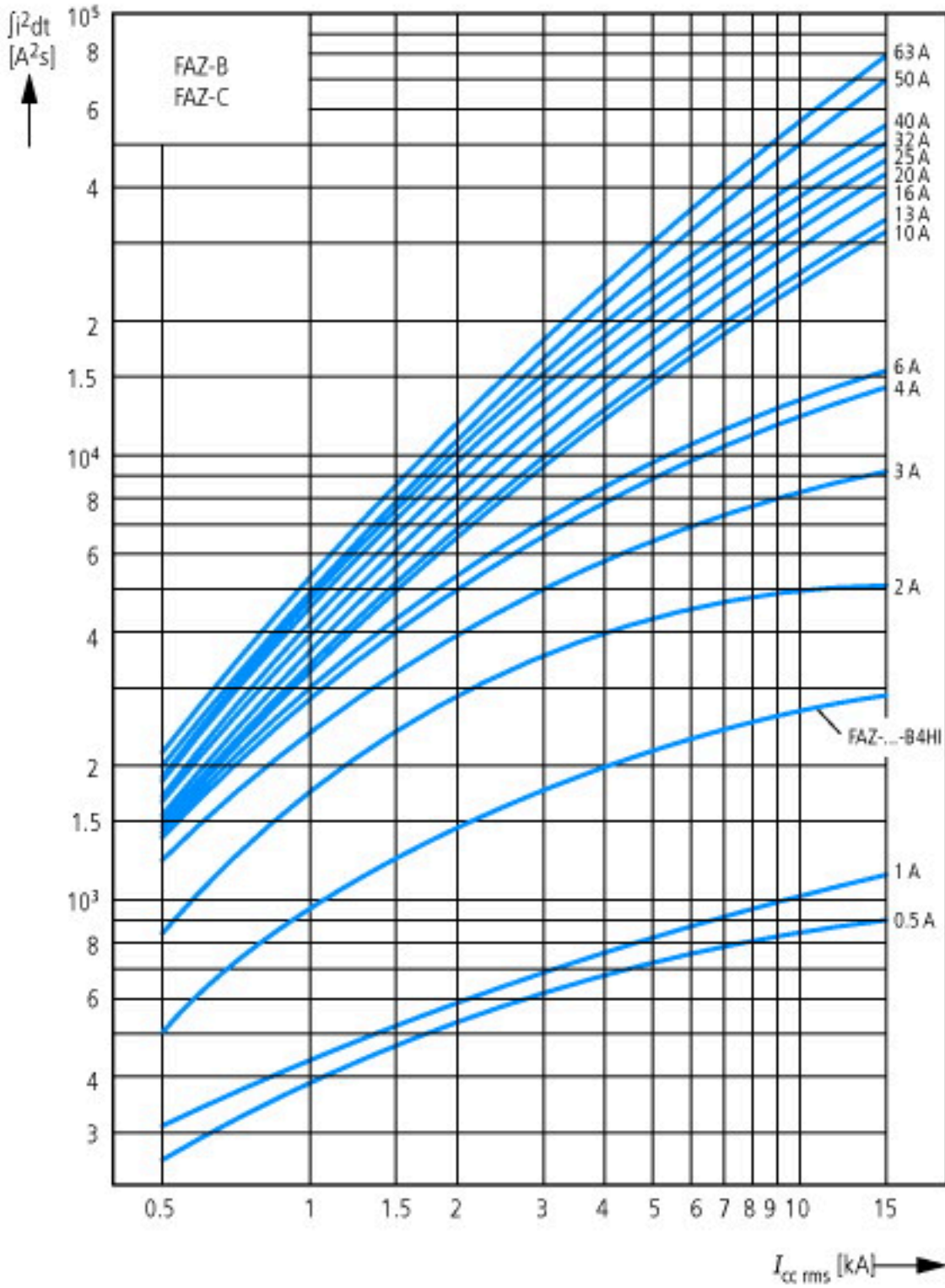
| Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)   |  |    |     |
|--|--|----|-----|
| Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ec@ss10.0.1-27-14-19-01 [AAB905014]) |  |    |     |
| Release characteristic   |  |    | C   |
| Number of poles (total)  |  |    | 3   |
| Number of protected poles  |  |    | 3   |
| Rated current  |  | A  | 32  |
| Rated voltage  |  | V  | 400 |
| Rated insulation voltage $U_i$   |  | V  | 440 |
| Rated impulse withstand voltage $U_{imp}$  |  | kV | 4   |
| Rated short-circuit breaking capacity $I_{cn}$ EN 60898 at 230 V   |  | kA | 10  |
| Rated short-circuit breaking capacity $I_{cn}$ EN 60898 at 400 V   |  | kA | 10  |
| Rated short-circuit breaking capacity $I_{cu}$ IEC 60947-2 at 230 V  |  | kA | 15  |
| Rated short-circuit breaking capacity $I_{cu}$ IEC 60947-2 at 400 V  |  | kA | 15  |

|   |                 |          |
|---|-----------------|----------|
| Voltage type                                    |                 | AC       |
| Frequency                                       | Hz              | 50 - 60  |
| Current limiting class                          |                 | 3        |
| Suitable for flush-mounted installation         |                 | No       |
| Concurrently switching N-neutral                |                 | No       |
| Over voltage category                           |                 | 3        |
| Pollution degree                                |                 | 2        |
| Additional equipment possible                   |                 | Yes      |
| Width in number of modular spacings             |                 | 3        |
| Built-in depth                                  | mm              | 70.5     |
| Degree of protection (IP)                       |                 | IP20     |
| Ambient temperature during operating            | °C              | -25 - 75 |
| Connectable conductor cross section multi-wired | mm <sup>2</sup> | 1 - 25   |
| Connectable conductor cross section solid-core  | mm <sup>2</sup> | 1 - 25   |

## Approvals

|                                  |  |   |
|----------------------------------|--|---|
| Product Standards                |  | IEC/EN 60947-2; IEC/EN 60898; EN 45545-2; IEC 61373; 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              |  | 480Y/277 VAC  |
| Degree of Protection             |  | IEC: IP20; UL/CSA Type: -   |

# Characteristics



Let-through energy  $I^2t$   
According to IEC/EN 60898







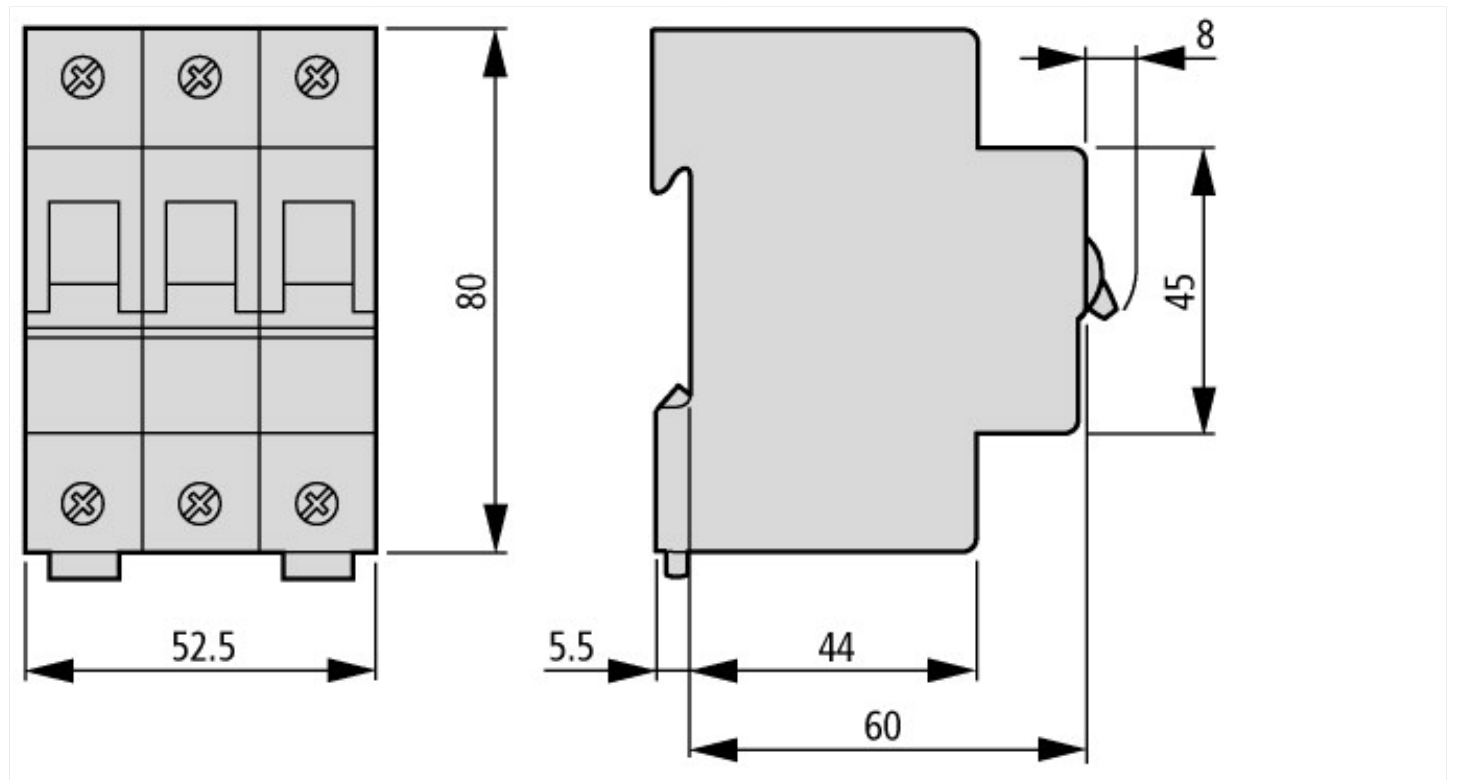




Tripping characteristic at 30 °C:  
 B, C, D to IEC/EN 60898



## Dimensions



## Additional product information (links)

Temperature dependency, derating

<https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ.pdf>