

DATASHEET - FAZ-B50/2



Miniature circuit breaker (MCB), 50A, 2p, B-Char, AC

Part no. FAZ-B50/2
Catalog No. 278739
Alternate Catalog No. FAZ-B50/2
EL-Nummer (Norway) 0001695118



Similar to illustration

Delivery program

| | | | |
|---|----------|----|--|
| Basic function | | | Miniature circuit-breakers |
| Number of poles | | | 2 pole |
| Tripping characteristic | | | B |
| Application | | | Switchgear for industrial and advanced commercial applications |
| Rated current | I_n | A | 50 |
| Rated switching capacity acc. to IEC/EN 60947-2 | I_{cu} | kA | 15 |
| Product range | | | FAZ |

Technical data

Electrical

| | | | |
|---|------------|---------|--------------------------------|
| Standards | | | IEC/EN 60947-2 IEC/EN 60898 |
| Rated operational voltage | U_e | V | |
| | U_e | V AC | 240/415 |
| Rated voltage according to UL | | V DC | 60 (per pole) |
| | 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 | 5 (UL1077) |
| 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 ² | |
| | | mm ² | 1 x 25 |
| | | mm ² | 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 | 50 |

| | | | |
|--|------------|----|--|
| Heat dissipation per pole, current-dependent | P_{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P_{vid} | W | 9.9 |
| 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 | | | B |
| Number of poles (total) | | | 2 |
| Number of protected poles | | | 2 |
| Rated current | A | | 50 |
| 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 | | | 2 |
| 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 ² | 1 - 25 |
| Connectable conductor cross section solid-core | | mm ² | 1 - 25 |

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 | | | 480Y/277 VAC; 96 VDC |
| Degree of Protection | | | IEC: IP20; UL/CSA Type: - |

Characteristics



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



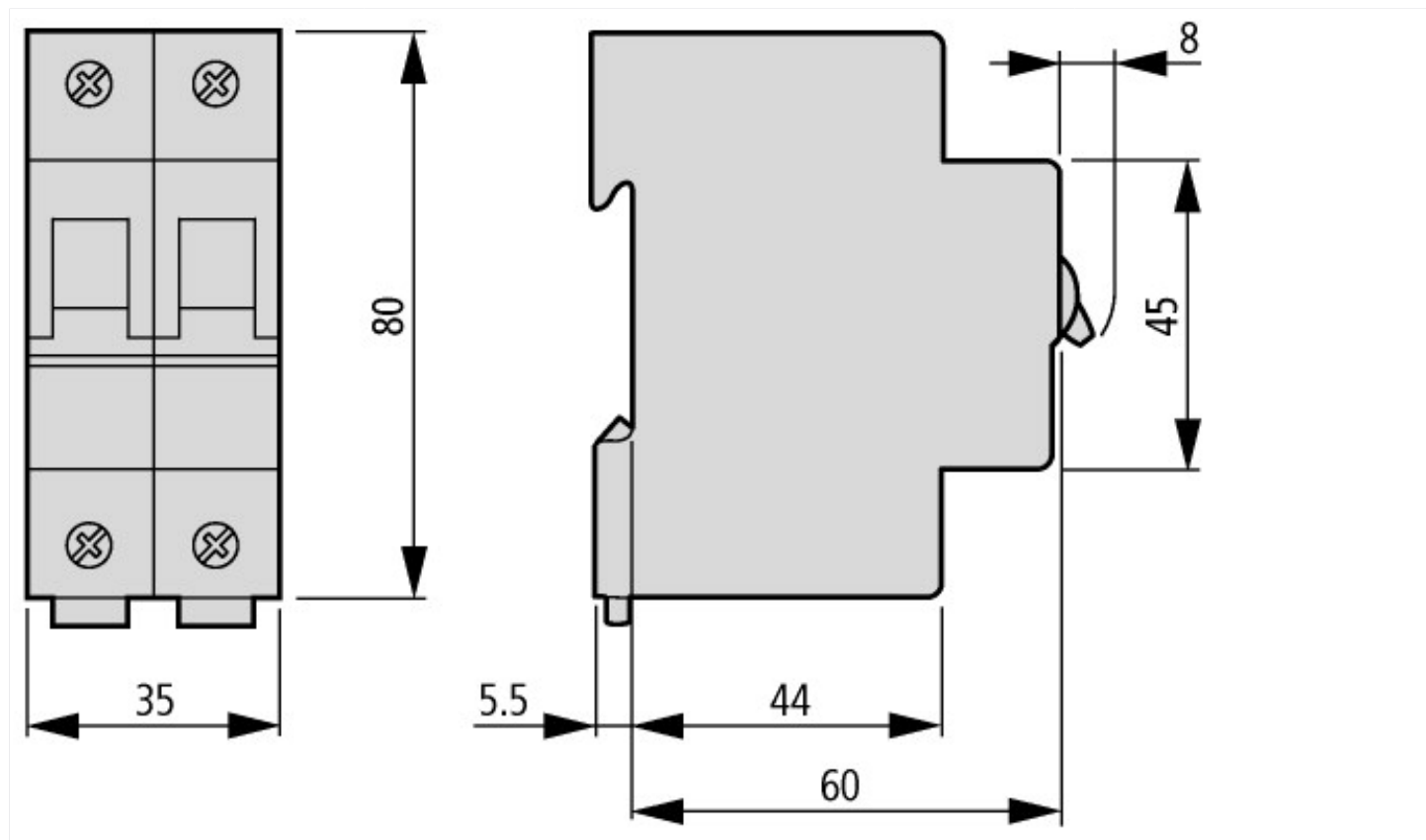






Tripping characteristic at 30 °C:
 B, C, D to IEC/EN 60898

Dimensions





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