DATASHEET - FAZ-Z4/1

Miniature circuit breaker (MCB), 4 A, 1p, characteristic: Z





Part no.FAZ-Z4/1Catalog No.278622Alternate CatalogFAZ-Z4/1No.EL-Nummer1695250(Norway)

Similar to illustration

Delivery program

| Miniature circuit-breakers 1 pole Z |
|--|
| |
| Z |
| |
| Switchgear for industrial and advanced commercial applications |
| 4 |
| A 10 |
| FAZ |
| |

Technical data

| Rade operational worksome Rade operational worksome Read operational worksome Re | Electrical | | | |
|--|---|-----------------|-----------------|---|
| Image: state s | Standards | | | |
| Number of the sector of the | Rated operational voltage | U _e | V | |
| Rated switching capacity act. to EC/EN 60947-2 Icu KA Icu Icu <td></td> <td>U_e</td> <td>V AC</td> <td>240/415</td> | | U _e | V AC | 240/415 |
| Apperational switching capacity KA FA | | | V DC | 60 (per pole) |
| Dranker derivitie B B C <thc< th=""> C <thc< th=""></thc<></thc<> | Rated switching capacity acc. to IEC/EN 60947-2 | l _{cu} | kA | 10 |
| Max.back-up fuse Max.back-up fuse Max.back-up fuse Selectivity Class Selectivity Class Generation Ifespan Itespan Itespan Vertion Itespan Vertion Itespan Vertion Itespan Vertion Vert | Operational switching capacity | | kA | 7.5 |
| Selectivity Class Parations | Characteristic | | | B, C, D, K, S, Z |
| ifespan Operations image: provide sector of incoming supply Direction of incoming supply se required Mechanical se required Mechanical mm sector of incoming supply Standard front dimension mm sector of incoming supply Mounting width per pole mm sector of incoming supply Mounting mm sector of incoming supply Degree of Protection mm sector of incoming supply Terminal sop and bottom mm incoming supply Terminal capacities mm ² incoming supply Interminal capacities mm ² incoming supply | Max. back-up fuse | | A gL/gG | 125 |
| Lifespan Operations > 10000 Direction of incoming supply as required Mechanical stradard front dimension Mon Standard front dimension mm \$ Beclosure height mm \$ Mounting width per pole mm \$ Mounting 15 Enclosure height Degree of Protection Mou F Enclosure height Terminals top and bottom Mon Enclosure height F Terminal capacities Min \$ 1000 Terminal capacities Min \$ \$ Terminal capacities Min \$ | Selectivity Class | | | 3 |
| Direction of incoming supply is required Mechanical Manual Standard front dimension mm 45 Enclosure height mm 80 Mounting width per pole mm 15.5 Mounting IEC/EN 60715 top-hat rail 120,1P40 (when fitted) Degree of Protection Mounting IEC/EN 60715 top-hat rail Terminals top and bottom Mounting IEC/EN 60715 top-hat rail Terminal protection Mounting Imm IEC/EN 60715 top-hat rail Terminal protection Mounting Imm IEC/EN 60715 top-hat rail Terminal protection Mounting Imm Imm Immeuse Terminal protection Mounting Imm Immeuse Immeuse Terminal capacities Mounting Immeuse Immeuse Immeuse Terminal capacities Mounting Immeuse Immeuse Immeuse Terminal capacities Immeuse Immeuse Immeuse Immeuse Terminal capacities Immeuse Immeuse Immeuse Immeuse Terminal capacities Immeuse Immeuse | lifespan | | | |
| Mechanical Image: I | Lifespan | Operations | | > 10000 |
| Standard front dimension mm 45 Enclosure height mm 80 Mounting width per pole mm 17.5 Mounting EC/EN 60715 top-hat rail EC/EN 60715 top-hat rail Degree of Protection Formal Society Formals Terminals top and bottom Formal Society Formals Terminal capacities Formal Society Formal Society Imm No No Imm No Standard from titled Imm Standard from titled Formals Imm No Standard from titled Imm No Standard from titled Imm No Standard from titled Imm Standard from titled Standard from titled Imm | Direction of incoming supply | | | as required |
| Enclosure height mm 80 Mounting width per pole mm 1.5 Mounting EC/EN 60715 top-hat rail EC/EN 60715 top-hat rail Degree of Protection Form purpose terminals Form purpose terminals Terminal protection Form purpose terminals Finger and back-of-hand proof to BGV A2 Terminal capacities mm ² 1×25 mm ² 2×10 2×10 Terminal for busbar material 80 80 | | | | |
| Mounting width per pole mm 1.5 Mounting Ferder of Protection Ferder of Protection Ferder of Protection Terminals top and bottom Ferder of Protection Ferder of Protection Ferder of Protection Terminal rotection Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protection Ferder of Protection Ferder of Protection Ferder of Protection Terminal capacities Ferder of Protecticapaciticapaciticapaciticapaciticapaciticapaciticapaciti | Standard front dimension | | mm | 45 |
| Mounting IC/EN 60715 top-hat rail Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom IPC Terminal protection IPC Terminal capacities IPC Immediate Immediate Immediat Im | Enclosure height | | mm | 80 |
| Degree of Protection Image: Base | Mounting width per pole | | mm | 17.5 |
| Terminals top and bottom Image: Section | Mounting | | | |
| Terminal protection Image: sector of the | Degree of Protection | | | IP20, IP40 (when fitted) |
| Terminal capacities mm ² Imm ² | Terminals top and bottom | | | Twin-purpose terminals |
| Image: | Terminal protection | | | Finger and back-of-hand proof to BGV A2 |
| Thickness of busbar material Market Market Market Market | Terminal capacities | | mm ² | |
| Thickness of busbar material mm 0.8 2 | | | mm ² | 1 x 25 |
| | | | mm ² | 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 | 4 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0 |

| Equipment heat dissipation, current-dependent | P _{vid} | W | 4 |
|--|-------------------|----|--|
| 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) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

| (eci@ss10.0.1-27-14-19-01 [AAB905014]) | | |
|--|----|---------|
| Release characteristic | | Z |
| Number of poles (total) | | 1 |
| Number of protected poles | | 1 |
| Rated current | А | 4 |
| Rated voltage | V | 230 |
| Rated insulation voltage Ui | V | 440 |
| Rated impulse withstand voltage Uimp | kV | 4 |
| Rated short-circuit breaking capacity Icn EN 60898 at 230 V | kA | 0 |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V | kA | 0 |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | kA | 10 |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | kA | 10 |
| 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 |
| | | |

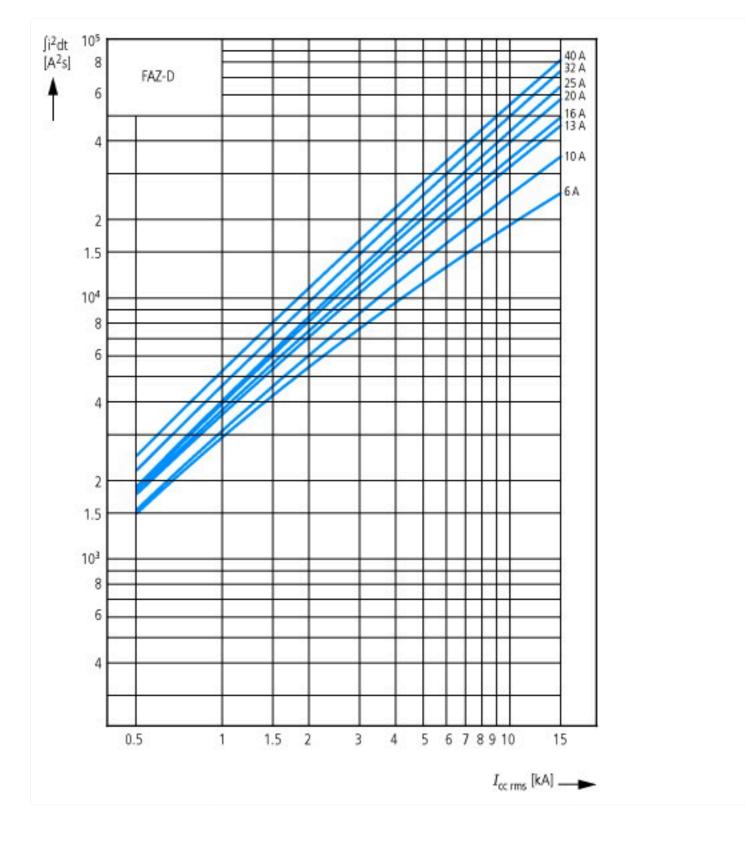
| Pollution degree | | | 2 |
|---|---|-----|----------|
| Additional equipment possible | | | Yes |
| Width in number of modular spacings | | | 1 |
| Built-in depth | 1 | mm | 70.5 |
| Degree of protection (IP) | | | IP20 |
| Ambient temperature during operating | | °C | -25 - 75 |
| Connectable conductor cross section multi-wired | 1 | mm² | 1 - 25 |
| Connectable conductor cross section solid-core | 1 | mm² | 1 - 25 |

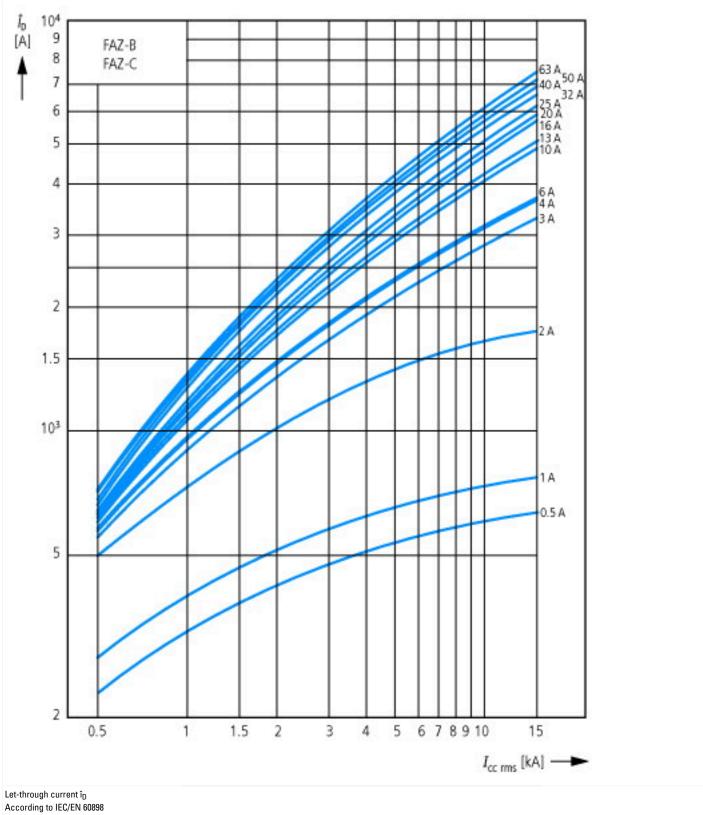
Approvals

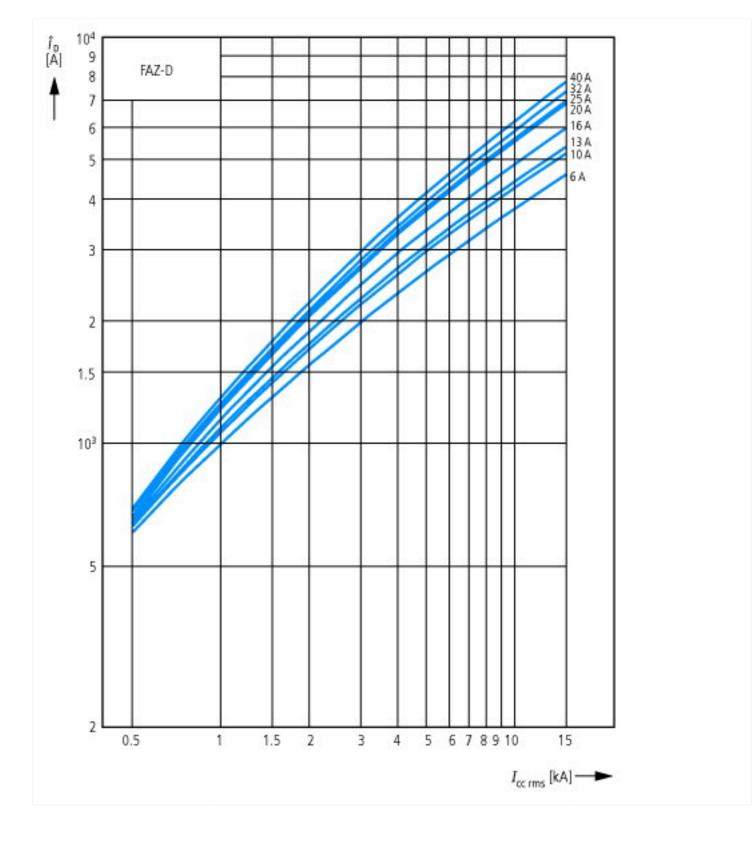
| Product Standards | IEC/EN 60947-2; IEC/EN 60898; EN 45545-2; IEC 61373; UL 1077; CSA-C22.2 No. 235; CE marking |
|----------------------------------|--|
| UL File No. | E177451 |
| UL Category Control No. | QVNU2, QVNU8 |
| CSA File No. | 204453 |
| CSA Class No. | 3215-30 |
| North America Certification | 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 | 277 VAC; 48 VDC |
| Degree of Protection | IEC: IP20; UL/CSA Type: - |

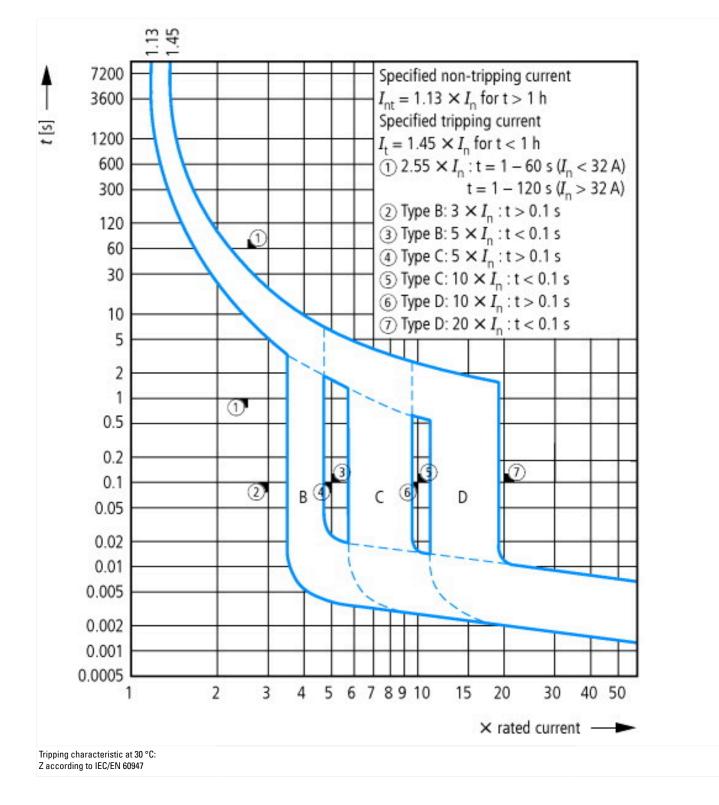
Characteristics



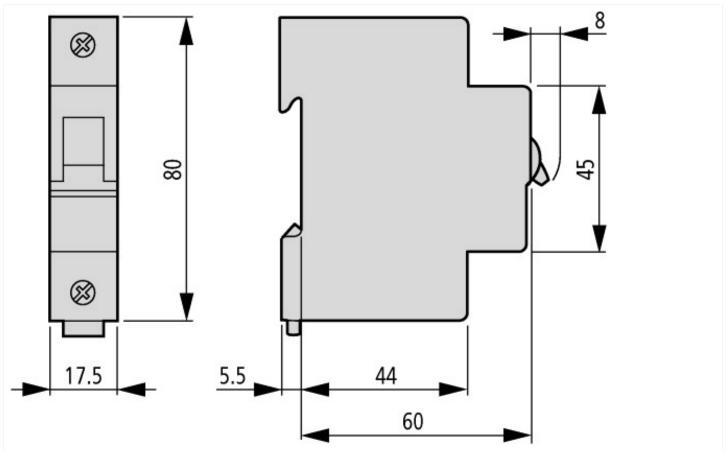








Dimensions



Additional product information (links)

Temperature dependency, derating

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