DATASHEET - FAZ-D6/3-NA

Miniature circuit breaker (MCB), 6 A, 3p, characteristic: D



| Part no. | FAZ-D6/3-NA |
|-----------|-------------|
| | 102264 |
| EL Number | 1691669 |
| (Norway) | |

| General specifications | |
|--|--|
| Product name | Eaton Moeller series xEffect - FAZ-NA, FAZ-RT MCB |
| Part no. | FAZ-D6/3-NA |
| EAN | 4015081021406 |
| Product Length/Depth | 105 millimetre |
| Product height | 75.5 millimetre |
| Product width | 53.1 millimetre |
| Product weight | 0.361 kilogram |
| Compliances | RoHS conform |
| Certifications | UL 489, CSA C22.2 No. 5 UL (File No. E235139) IEC/EN 60947-2 UL 489 CSA (Class No. 1432-01) IEC 60947-2 UL (Category Control Number DIVQ) Specially designed for North America, suitable as BCPD North America (UL listed, CSA certified) CE marking CSA (File No. 204453) CSA-C22.2 No. 5-09 IEC 61373 EN45545-2 |
| Product Tradename | xEffect - FAZ-NA, FAZ-RT |
| Product Type | мсв |
| Product Sub Type | None |
| Delivery program | |
| Application | Feeder circuits, branch circuits Switchgear for export to North America (UL-listed) |
| Number of poles | Three-pole |
| Number of poles (total) | 3 |
| Number of poles (protected) | 3 |
| Tripping characteristic | D |
| Release characteristic | D |
| Amperage Rating | 6 A |
| Туре | FAZ-NA Miniature circuit breaker |
| Technical Data - Electrical | |
| Voltage type | AC |
| Voltage rating | 277 V AC / 480 V AC |
| Voltage rating at DC | 60 V DC |
| Voltage rating (IEC/EN 60947-2) | 415 V |
| Voltage rating (UL) | 480Y/277 V |
| Rated operational voltage (Ue) - max | 415 V |
| Rated insulation voltage (Ui) | 440 V |
| Rated impulse withstand voltage (Uimp) | 4 kV |
| Frequency rating - min | 50 Hz |
| Frequency rating - max | 60 Hz |
| Rated switching capacity (IEC/EN 60947-2) | 15 kA |
| Rated short-circuit breaking capacity (EN 60898) at 230 V | 0 kA |
| Rated short-circuit breaking capacity (EN 60898) at 400 V | 0 kA |
| Rated short-circuit breaking capacity (IEC 60947-2) at 230 V | 15 kA |
| Rated short-circuit breaking capacity (IEC 60947-2) at 400 V | 15 kA |
| Selectivity class | 3 |

| Lifespan, electrical | 20000 operations |
|--|---|
| | |
| Overvoltage category | 2 |
| Pollution degree Direction of incoming supply | |
| | As required |
| Technical Data - Mechanical | |
| Frame | 45 mm |
| Enclosure width | 105 mm |
| Width in number of modular spacings | 3 |
| Built-in depth | 70.5 mm |
| Mounting width | 17.7 mm |
| Mounting width per pole | 17.7 mm |
| Mounting Method | Top-hat rail IEC/EN 60715 |
| Mounting position | As required |
| Degree of protection | IP20 (IEC) IP40 (when fitted) UL/CSA Type: - IP20 |
| Terminals (top and bottom) | Twin-purpose terminals |
| Connectable conductor cross section (solid-core) - min | 1 mm ² |
| Connectable conductor cross section (solid-core) - max | 25 mm ² |
| Connectable conductor cross section (multi-wired) - min | 1 mm ² |
| Connectable conductor cross section (multi-wired) - max | 25 mm ² |
| Terminal protection | Finger and hand touch safe, DGUV VS3, EN 50274 |
| Tightening torque Design verification as per IEC/EN 61439 - technical data | UL: 4 Nm (36 lb-in) for AWG 6 Max. 2.4 Nm UL: 2.4 Nm (21 lb-in) for AWG 18 - AWG 12 UL: 2.8 Nm (25 lb-in) for AWG 10 - AWG 8 |
| · · | C.A. |
| Rated operational current for specified heat dissipation (In) | 6 A |
| Heat dissipation per pole, current-dependent | 0 W |
| Equipment heat dissipation, current-dependent | 3.5 W |
| Static heat dissipation, non-current-dependent | 0 W |
| Heat dissipation capacity | 0 W |
| Ambient operating temperature - min | -25 °C |
| Ambient operating temperature - max | 75 °C |
| Design verification as per IEC/EN 61439 | |
| 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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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. |
| 10.9.2 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. |
| Additional information | |
| Current limiting class | 3 |
| Features | Additional equipment possible |
| Functions | Current limiting circuit breaker |
| Special features | Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity |
| Used with | FAZ-NA Miniature circuit breaker |

Technical data ETIM 9.0

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@ss13-27-14-19-01 [AAB905019])

| Alease Ararteristic Aunor of protected poles Aunor of protec | | | |
|--|---|-----|----------|
| Number of poles (total) Image: space of the | Built-in depth | mm | 70.5 |
| Number of protected poles Image: space protect | Release characteristic | | D |
| And education And educ | Number of poles (total) | | 3 |
| Name No No Alade violage V 40 Alade violage Uin V 40 Alade violage Uinp V 40 Alade violage typin V 40 Alade short-circuit breaking capacity lon according to EN 60698 at 200 V V 60 Alade short-circuit breaking capacity lon according to EN 60698 at 400 V V 60 Alade short-circuit breaking capacity lon according to EC 60947-2 at 230 V K 70 Alade short-circuit breaking capacity lon according to EC 60947-2 at 230 V K 70 Alade short-circuit breaking capacity lon according to EC 60947-2 at 230 V K 70 Alade short-circuit breaking capacity lon according to EC 60947-2 at 240 V K 70 Alade short-circuit breaking capacity lon according to EC 60947-2 at 240 V K 70 Power Joss K K 70 Concertation stallation K 80 Power Joss K 80 Concurrently switching neutral conductor K No Power Joss Shele K 80 Vidt in number of modular s | Number of protected poles | | 3 |
| Based insultation voltage Ui Kaled Kaled Based insultation voltage Uimp 40 40 Based insultation voltage Uimp 6 6 Valued Short-circuit breaking capacity Icn according to EN 60989 at 400 V KA 5 Based short-circuit breaking capacity Icn according to IEC 60947-2 at 200 V KA 5 Prequency KA 5 6 Prequency KA 5 6 Preventiss KA 5 6 Preventiss KA 5 6 Concurrently switching neutral conductor VM 5 6 Concurrently switching neutral conductor VM 5 6 Concurrently switching neutral conductor VM 6 6 Concurrently switching neutral conductor VM 6 6 6 Volta in number of modular spacings VM 7 6 | Rated current | А | 6 |
| Atted inpulse withstand voltage UippKV4Atted inpulse withstand voltage UippKA0Atted short-circuit breaking capacity Lon according to EN 60998 at 400 VKA0Atted short-circuit breaking capacity Lon according to EC 60947-2 at 230 VKA15Atted short-circuit breaking capacity Lon according to IEC 60947-2 at 200 VKA50Atted short-circuit breaking capacity Lon according to IEC 60947-2 at 400 VKA50Power lossKA5050Power lossV5050Courrent limiting classV5050Power lotsge categoryV5050Power lotsge category <td>Rated voltage</td> <td>V</td> <td>415</td> | Rated voltage | V | 415 |
| Ated short-circuit breaking capacity lon according to EN 60898 at 230 V KA 0 Ated short-circuit breaking capacity lon according to EN 60989 at 400 V KA 0 Bated short-circuit breaking capacity lon according to EC 60947-2 at 230 V KA 0 Bated short-circuit breaking capacity lon according to EC 60947-2 at 230 V KA 0 Prequency KA 0 0 Power loss 0 0 0 Concurrent limiting class V 8 0 Power loss V 0 0 0 Concurrently witching neutral conductor V No No 0 Power loss V No No 0 | Rated insulation voltage Ui | V | 440 |
| Addage type AC Added short-circuit breaking capacity lcu according to EK 60987-2 at 230 V KA 5 Added short-circuit breaking capacity lcu according to EK 60947-2 at 230 V KA 5 Added short-circuit breaking capacity lcu according to EK 60947-2 at 230 V KA 5 Prequency Hz 5 5 Power loss V 8 3 Current limiting class V 8 5 Concurrenty switching neutral conductor V 8 3 Power loss category V 8 3 Power loss category V 9 No Power loss category <td>Rated impulse withstand voltage Uimp</td> <td>kV</td> <td>4</td> | Rated impulse withstand voltage Uimp | kV | 4 |
| Rated short-circuit breaking capacity lcu according to EN 60898 at 400 V kA 5 Rated short-circuit breaking capacity lcu according to EC 60947-2 at 230 V KA 5 Rated short-circuit breaking capacity lcu according to EC 60947-2 at 400 V 6 60 Prequency KA 5 Power loss V 36 Current limiting class V 36 Concurrently switching neutral conductor V 30 Pollution degree V 30 Additional equipment possible V 30 Midmint temperature during operating V 30 Concectable conductor cross section multi-wired V So Concectable conductor cross section solid-core V So Concectable conductor cross section solid-core C 20 Concectable conductor cross section solid-core mn ² So Concectable conductor cross section solid-core mn ² 125 | Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V | kA | 0 |
| Rated short-circuit breaking capacity lcu according to IEC 60947-2 at 230 V kA 5 Rated short-circuit breaking capacity lcu according to IEC 60947-2 at 400 V kA 5 Prequency LZ 50-60 Power loss W 36 Current limiting class M 5 Power loss M 5 Current limiting class M 36 Concurrently switching neutral conductor M No Power loss No M Pollution degree M S Pollution degree M S Additional equipment possible M S With in number of modular spacings M S Degree of protection (IP) M S Ambient temperature during operating °C S Connectable conductor cross section multi-wired mm ² S Connectable conductor cross section solid-core m ² S | Voltage type | | AC |
| Rated short-circuit breaking capacity lou according to IEC 60947-2 at 400 V KA 5 Frequency IAB 50-60 Power loss IAW 36 Durrent limiting class IAW 30-60 Churrent limiting class IAW 30-60 Concurrently switching neutral conductor IAW 30-60 Doer voltage category IAW 30-60 Pollution degree IAW 30-60 Vidt in number of modular spacings IAW 30-60 Degree of protection (IP) IAW IAW Ambient temperature during operating IAW 20-75 Connectable conductor cross section solid-core IMM ² 1-25 | Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V | kA | 0 |
| FrequencyHz5 - 60Power lossW3Current limiting classM3Fush-mounted installationM3Concurrently switching neutral conductorMMoDer voltage categoryM3Pollution degreeM3Additional equipment possibleMSeVidth in number of modular spacingsMSeDegree of protection (IP)MSeAmbient temperature during operatingCSeConnectable conductor cross section solid-coremm ² 125Connectable conductor cross section solid-coremm ² 125 | Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V | kA | 15 |
| Power loss 6 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 | Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V | kA | 15 |
| Current limiting class 3 Current limiting class No Current limiting class No Concurrently switching neutral conductor No Concurrently switching neutral conductor No Dour voltage category S Pollution degree S Additional equipment possible Yes Nith in number of modular spacings S Ambient temperature during operating C Sonnectable conductor cross section solid-core mm ² Sonnectable conductor cross section solid-core mm ² | Frequency | Hz | 50 - 60 |
| Polution degree % Additional equipment possible % Notestable conductor (IP) % Ambient temperature during operating % Connectable conductor cross section multi-wired mm² Management possible mm² Solution degree % Additional equipment possible % Motional equipment possible % Solution (IP) % Ambient temperature during operating % Solution cross section multi-wired mm² Solution cross section solid-core mm² | Power loss | W | 3.6 |
| Concurrently switching neutral conductor No Over voltage category 3 Pollution degree Yes Additional equipment possible Yes Degree of protection (IP) IP20 Ambient temperature during operating Connectable conductor cross section multi-wired mm ² 125 Connectable conductor cross section solid-core mm ² 125 | Current limiting class | | 3 |
| Duer voltage category 3 Pollution degree 3 Additional equipment possible 5 Width in number of modular spacings 6 5 Degree of protection (IP) 1 125 Ambient temperature during operating mm² 125 | Flush-mounted installation | | No |
| Pollution degree2Additional equipment possibleYesNidth in number of modular spacingsIDegree of protection (IP)IAmbient temperature during operatingCConnectable conductor cross section multi-wiredmm²I 25Connectable conductor cross section solid-coremm²I 25 | Concurrently switching neutral conductor | | No |
| Additional equipment possible Mathematical equipment possible Yes Width in number of modular spacings 3 Degree of protection (IP) IP20 Ambient temperature during operating °C 25 - 75 Connectable conductor cross section solid-core mm² 1 - 25 | Over voltage category | | 3 |
| Width in number of modular spacingsImage: Spacing Spa | Pollution degree | | 2 |
| Degree of protection (IP) IP20 Ambient temperature during operating °C 25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25 | Additional equipment possible | | Yes |
| Ambient temperature during operating °C -25 - 75 Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25 | Width in number of modular spacings | | 3 |
| Connectable conductor cross section multi-wired mm² 1 - 25 Connectable conductor cross section solid-core mm² 1 - 25 | Degree of protection (IP) | | IP20 |
| Connectable conductor cross section solid-core mm ² 1 - 25 | Ambient temperature during operating | °C | -25 - 75 |
| | Connectable conductor cross section multi-wired | mm² | 1 - 25 |
| Explosion-proof No | Connectable conductor cross section solid-core | mm² | 1 - 25 |
| | Explosion-proof | | No |