

## Miniature circuit breaker (MCB), 3 A, 2p, characteristic: C

**Part no.**                   **FAZ-C3/2-NA**  
                                   **102161**  
**EL Number**               **1691590**  
**(Norway)**

| General specifications                                       |  |  |
|--|--|--|
| Product name   |  | Eaton Moeller series xEffect - FAZ-NA, FAZ-RT MCB  |
| Part no.   |  | FAZ-C3/2-NA  |
| EAN  |  | 4015081020379  |
| Product Length/Depth   |  | 105 millimetre   |
| Product height   |  | 75.5 millimetre  |
| Product width  |  | 35.4 millimetre  |
| Product weight   |  | 0.246 kilogram   |
| Compliances  |  | RoHS conform   |
| Certifications   |  | CE marking<br>CSA-C22.2 No. 5-09<br>UL (File No. E235139)<br>IEC/EN 60947-2<br>UL 489<br>Specially designed for North America, suitable as BCPD<br>UL (Category Control Number DIVQ)<br>North America (UL listed, CSA certified)<br>CSA (Class No. 1432-01)<br>UL 489, CSA C22.2 No. 5<br>CSA (File No. 204453)<br>IEC 60947-2<br>EN45545-2<br>IEC 61373 |
| Product Tradename  |  | xEffect - FAZ-NA, FAZ-RT   |
| Product Type   |  | MCB  |
| Product Sub Type   |  | None   |
| Delivery program   |  |  |
| Application  |  | Feeder circuits, branch circuits<br>Switchgear for export to North America (UL-listed)   |
| Number of poles  |  | Two-pole   |
| Number of poles (total)                                      |  | 2  |
| Number of poles (protected)                                  |  | 2  |
| Tripping characteristic                                      |  | C  |
| Release characteristic                                       |  | C  |
| Amperage Rating  |  | 3 A  |
| Type   |  | FAZ-NA<br>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)                              |  | 440 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  |
| Breaking capacity  |  | 10 kA (UL489)  |
| 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  |

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| Selectivity class  |  | 3   |
| Lifespan, electrical   |  | 20000 operations  |
| Overvoltage category   |  | III   |
| Pollution degree   |  | 2   |
| Direction of incoming supply   |  | As required   |
| <b>Technical Data - Mechanical</b>   |  |   |
| Frame  |  | 45 mm   |
| Enclosure width  |  | 105 mm  |
| Width in number of modular spacings  |  | 2   |
| 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   |  | IP40 (when fitted)<br>UL/CSA Type: -<br>IP20<br>IP20 (IEC)  |
| Terminals (top and bottom)   |  | Twin-purpose terminals  |
| Connectable conductor cross section (solid-core) - min                           |  | 1 mm <sup>2</sup>   |
| Connectable conductor cross section (solid-core) - max                           |  | 25 mm <sup>2</sup>  |
| Connectable conductor cross section (multi-wired) - min                          |  | 1 mm <sup>2</sup>   |
| Connectable conductor cross section (multi-wired) - max                          |  | 25 mm <sup>2</sup>  |
| Terminal protection  |  | Finger and hand touch safe, DGUV VS3, EN 50274  |
| Tightening torque  |  | UL: 2.8 Nm (25 lb-in) for AWG 10 - AWG 8<br>Max. 2.4 Nm<br>UL: 2.4 Nm (21 lb-in) for AWG 18 - AWG 12<br>UL: 4 Nm (36 lb-in) for AWG 6 |
| <b>Design verification as per IEC/EN 61439 - technical data</b>                  |  |   |
| Rated operational current for specified heat dissipation (In)                    |  | 3 A   |
| Heat dissipation per pole, current-dependent                                     |  | 0 W   |
| Equipment heat dissipation, current-dependent                                    |  | 2.4 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   |
| <b>Design verification as per IEC/EN 61439</b>                                   |  |   |
| 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.  |

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| 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.  |
| <b>Additional information</b>       |  |   |
| 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                           |  | Miniature circuit breaker<br>FAZ-NA   |

## 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]) |                 |          |
| Built-in depth  | mm              | 70.5     |
| Release characteristic  |                 | C        |
| Number of poles (total)   |                 | 2        |
| Number of protected poles   |                 | 2        |
| Rated current   | A               | 3        |
| Rated voltage   | V               | 415      |
| Rated insulation voltage $U_i$  | V               | 440      |
| Rated impulse withstand voltage $U_{imp}$   | kV              | 4        |
| Rated short-circuit breaking capacity $I_{cn}$ according to EN 60898 at 230 V   | kA              | 0        |
| Voltage type  |                 | AC       |
| Rated short-circuit breaking capacity $I_{cn}$ according to EN 60898 at 400 V   | kA              | 0        |
| Rated short-circuit breaking capacity $I_{cu}$ according to IEC 60947-2 at 230 V  | kA              | 15       |
| Rated short-circuit breaking capacity $I_{cu}$ according to IEC 60947-2 at 400 V  | kA              | 15       |
| Frequency   | Hz              | 50 - 60  |
| Power loss  | W               | 2.4      |
| Current limiting class  |                 | 3        |
| Flush-mounted installation  |                 | No       |
| Concurrently switching neutral conductor  |                 | No       |
| Over voltage category   |                 | 3        |
| Pollution degree  |                 | 2        |
| Additional equipment possible   |                 | Yes      |
| Width in number of modular spacings   |                 | 2        |
| 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   |
| Explosion-proof   |                 | No       |