## DATASHEET - FAZ-C1,6/3

## Miniature circuit breaker (MCB), 1.6 A, 3p, characteristic: C



| Part no.  | FAZ-C1,6/3 |
|-----------|------------|
|           | 278860     |
| EL Number | 1691105    |
| (Norway)  |            |

| Product name  | Eaton Moeller series xEffect - FAZ MCB   |
|---|--|
| Part no.  | FAZ-C1,6/3   |
| EAN   | 4015082788605  |
| Product Length/Depth  | 80 millimetre  |
| Product height  | 75.5 millimetre  |
| Product width   | 54 millimetre  |
| Product weight  | 0.339 kilogram   |
| Compliances   | UL CSA09 (with supplementary protector only)<br>RoHS conform   |
| Certifications  | CE marking<br>UL 1077<br>North America (UL recognized, CSA certified)<br>UL (Category Control Number QVNU2, QVNU8)<br>CSA (Class No. 3215-30)<br>UL (File No. E177451)<br>IEC/EN 60947-2<br>IEC/EN 60998<br>CSA (File No. 204453)<br>CSA-C22.2 No. 235<br>EN45545-2<br>IEC 61373 |
| Product Tradename   | xEffect - FAZ  |
| Product Type  | мсв  |
| Product Sub Type  | None   |
|   |  |
| Application   | Branch circuits, not as BCPD<br>Switchgear for industrial and advanced commercial applications<br>xEffect - Switchgear for industrial and advanced commercial applications   |
| Number of poles   | Three-pole   |
| Number of poles (total)   | 3  |
| Number of poles (protected)                                     | 3  |
| Tripping characteristic   | С  |
| Release characteristic  | С  |
| Amperage Rating   | 1.6 A  |
| Түре  | FAZ<br>Miniature circuit breaker   |
|   |  |
| Voltage type  | AC   |
| Voltage rating  | 240 V AC / 415 V AC  |
| Voltage rating at DC  | 60 V DC (per pole)   |
| Voltage rating (IEC/EN 60898-1)                                 | 415  |
| Voltage rating (UL)   | 480Y/277 V   |
| Voltage rating (UL CSA 13)                                      | 480 Y/277 V AC   |
| Rated operational voltage (Ue) - max                            | 400 V  |
| Operational voltage (IEC/EN 60947-2) - max                      | 440  |
| 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) at max voltage rating | 10 kA  |
| Rated switching capacity (IEC/EN 60947-2)                       | 15 kA  |
| Rated switching capacity (IEC/EN 60898-1)                       | 10 kA  |
| Operational switching capacity                                  | 7.5 kA   |

| Breaking capacity  | 10 kA (UL1077)   |
|--|--|
| Rated service short-circuit breaking capacity (IEC/EN 60898-1)                   | 7.5 kA   |
| Rated service short-circuit breaking capacity (IEC/EN 60947-2)                   | 7.5 kA   |
| Rated short-circuit breaking capacity (EN 60898) at 230 V                        | 10 kA  |
| Rated short-circuit breaking capacity (EN 60898) at 400 V                        | 10 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  |
| Admissible back-up fuse - max  | 125 A gL/gG  |
| Selectivity class  | 3  |
| Lifespan, electrical   | 10000 operations   |
| Overvoltage category   | III  |
| Pollution degree   | 2  |
| Direction of incoming supply   | As required  |
|  |  |
| Frame  | 45 mm  |
| Enclosure width  | 80 mm  |
| Width in number of modular spacings  | 3  |
| Built-in depth   | 70.5 mm  |
| Mounting width per pole  | 17.5 mm  |
| Mounting width   | 17.5 mm  |
| Mounting Method  | Top-hat rail IEC/EN 60715  |
| Mounting position  | As required  |
| Degree of protection   | IP20<br>IP20 (IEC)<br>IP40 (when fitted)<br>UL/CSA Type: -         |
| 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 capacity of screw terminals for main cable                              | 10 mm² (2x)  |
| Terminal capacity (control cable)  | 25 mm² (1x)  |
| Terminal protection  | Finger and hand touch safe, DGUV VS3, EN 50274                     |
| Busbar material thickness  | 0.8 mm - 2 mm  |
|  |  |
| Rated operational current for specified heat dissipation (In)                    | 1.6 A  |
| Heat dissipation per pole, current-dependent                                     | 0 W  |
| Equipment heat dissipation, current-dependent                                    | 4.7 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  |
| 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.                         |
|  |  |
| Current limiting class                                   | 3  |
| Features   | Additional equipment possible  |
| 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   |

## **Technical data ETIM 8.0**

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@ss10.0.1-27-14-13-01 [AAD300014])   |     |          |
|--|-----|----------|
| Built-in depth   | mm  | 70.5     |
| Release characteristic   |     | C        |
| Number of poles (total)  |     | 3        |
| Number of protected poles  |     | 3        |
| Rated current  | А   | 1.6      |
| Rated voltage  | V   | 400      |
| Rated insulation voltage Ui  | V   | 440      |
| Rated impulse withstand voltage Uimp   | kV  | 4        |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 230 $V$     | kA  | 10       |
| Voltage type   |     | AC       |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 400 $V$     | kA  | 10       |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V $$ | kA  | 15       |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V $$ | kA  | 15       |
| Frequency  | Hz  | 50 - 60  |
| 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  |     | 3        |
| 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   |
| Explosion-proof  |     | No       |
|  |     |          |