

## Miniature circuit breaker (MCB), 25 A, 1p+N, characteristic: C

**Part no.** FAZ-C25/1N  
**278676**  
**EL Number** 1695208  
**(Norway)**

| General specifications                                          |                                                                                                                                            |
|-----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Product name                                                    | Eaton Moeller series xEffect - FAZ MCB                                                                                                     |
| Part no.                                                        | FAZ-C25/1N                                                                                                                                 |
| EAN                                                             | 4015082786762                                                                                                                              |
| Product Length/Depth                                            | 80 millimetre                                                                                                                              |
| Product height                                                  | 75.5 millimetre                                                                                                                            |
| Product width                                                   | 36 millimetre                                                                                                                              |
| Product weight                                                  | 0.214 kilogram                                                                                                                             |
| Compliances                                                     | RoHS conform                                                                                                                               |
| Certifications                                                  | IEC/EN 60947-2<br>IEC/EN 60898<br>IEC 61373<br>EN45545-2                                                                                   |
| Product Tradename                                               | xEffect - FAZ                                                                                                                              |
| Product Type                                                    | MCB                                                                                                                                        |
| Product Sub Type                                                | None                                                                                                                                       |
| Delivery program                                                |                                                                                                                                            |
| Application                                                     | Switchgear for industrial and advanced commercial applications<br>xEffect - Switchgear for industrial and advanced commercial applications |
| Number of poles                                                 | Single-pole + N                                                                                                                            |
| Number of poles (total)                                         | 2                                                                                                                                          |
| Number of poles (protected)                                     | 1                                                                                                                                          |
| Tripping characteristic                                         | C                                                                                                                                          |
| Release characteristic                                          | C                                                                                                                                          |
| Amperage Rating                                                 | 25 A                                                                                                                                       |
| Type                                                            | FAZ<br>Miniature circuit breaker                                                                                                           |
| Technical Data - Electrical                                     |                                                                                                                                            |
| 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)                                 | 240 V AC                                                                                                                                   |
| Voltage rating (UL)                                             | 277 V                                                                                                                                      |
| Rated operational voltage (Ue) - max                            | 230 V                                                                                                                                      |
| Operational voltage (IEC/EN 60947-2) - max                      | 254 V AC                                                                                                                                   |
| 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                                                                                                                                      |

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| 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                                                                                                                      |
| <b>Technical Data - Mechanical</b>                                               |  |                                                                                                                                  |
| Frame                                                                            |  | 45 mm                                                                                                                            |
| Enclosure width                                                                  |  | 80 mm                                                                                                                            |
| Width in number of modular spacings                                              |  | 2                                                                                                                                |
| 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>IP40 (when fitted)                                                                                                       |
| 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 mm <sup>2</sup> (2x)                                                                                                          |
| Terminal capacity (control cable)                                                |  | 25 mm <sup>2</sup> (1x)                                                                                                          |
| Terminal protection                                                              |  | Finger and hand touch safe, DGUV VS3, EN 50274                                                                                   |
| Busbar material thickness                                                        |  | 0.8 mm - 2 mm                                                                                                                    |
| <b>Design verification as per IEC/EN 61439 - technical data</b>                  |  |                                                                                                                                  |
| Rated operational current for specified heat dissipation (In)                    |  | 25 A                                                                                                                             |
| Heat dissipation per pole, current-dependent                                     |  | 0 W                                                                                                                              |
| Equipment heat dissipation, current-dependent                                    |  | 2.5 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                                                                                                                            |
| <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<br>Concurrently switching N-neutral                                         |
| 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 9.0

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| 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                                                                                                                                                                                     |                 | 1        |
| Rated current                                                                                                                                                                                                 | A               | 25       |
| Rated voltage                                                                                                                                                                                                 | V               | 230      |
| 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              | 10       |
| Voltage type                                                                                                                                                                                                  |                 | AC       |
| Rated short-circuit breaking capacity $I_{cn}$ according to EN 60898 at 400 V                                                                                                                                 | kA              | 10       |
| 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               | 3.3      |
| Current limiting class                                                                                                                                                                                        |                 | 3        |
| Flush-mounted installation                                                                                                                                                                                    |                 | No       |
| Concurrently switching neutral conductor                                                                                                                                                                      |                 | Yes      |
| 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       |