

## Miniature circuit breaker (MCB), 2 A, 1p+N, characteristic: B

**Part no.** FAZ-B2/1N  
**Catalog No.** 278636  
**Alternate Catalog No.** FAZ-B2/1N  
**EL-Nummer (Norway)** 1666736

Similar to illustration

## Delivery program

|                                                 |          |    |                                                                |
|-------------------------------------------------|----------|----|----------------------------------------------------------------|
| Basic function                                  |          |    | Miniature circuit-breakers                                     |
| Number of poles                                 |          |    | 1 pole+N                                                       |
| Tripping characteristic                         |          |    | B                                                              |
| Application                                     |          |    | Switchgear for industrial and advanced commercial applications |
| Rated current                                   | $I_n$    | A  | 2                                                              |
| Rated switching capacity acc. to IEC/EN 60947-2 | $I_{cu}$ | kA | 15                                                             |
| Product range                                   |          |    | FAZ                                                            |

## Technical data

## Electrical

|                                                                                                     |          |      |                       |
|-----------------------------------------------------------------------------------------------------|----------|------|-----------------------|
| Standards                                                                                           |          |      | EN 45545-2; IEC 61373 |
| Rated switching capacity acc. to IEC/EN 60947-2                                                     | $I_{cu}$ | kA   | 15                    |
| Breaking capacity according to UL                                                                   |          | kA   | 10 (UL1077)           |
| Max operational voltage according to IEC/EN 60947-2                                                 |          | V AC | 254                   |
| Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)                      | $I_{cu}$ | kA   | 10                    |
| Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) | $I_{cs}$ |      | 7,5 kA                |
| Rated voltage according to IEC/EN 60898-1                                                           | $U_n$    | V AC | 240                   |
| Rated switching capacity according to IEC/EN 60898-1                                                | $I_{cn}$ | kA   | 10                    |
| Rated service short-circuit breaking capacity according to IEC/EN 60898-1                           | $I_{cs}$ |      | 7,5 kA                |

## Design verification as per IEC/EN 61439

|                                                                                                                        |            |    |                                                                             |
|------------------------------------------------------------------------------------------------------------------------|------------|----|-----------------------------------------------------------------------------|
| Technical data for design verification                                                                                 |            |    |                                                                             |
| Rated operational current for specified heat dissipation                                                               | $I_n$      | A  | 2                                                                           |
| Heat dissipation per pole, current-dependent                                                                           | $P_{vid}$  | W  | 0                                                                           |
| Equipment heat dissipation, current-dependent                                                                          | $P_{vid}$  | W  | 1.5                                                                         |
| 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 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) (ec1@ss10.0.1-27-14-19-01 [AAB905014]) |                 |          |  |
| Built-in depth                                                                                                                                                                                                    | mm              | 70.5     |  |
| Release characteristic                                                                                                                                                                                            |                 | B        |  |
| Number of poles (total)                                                                                                                                                                                           |                 | 2        |  |
| Number of protected poles                                                                                                                                                                                         |                 | 1        |  |
| Rated current                                                                                                                                                                                                     | A               | 2        |  |
| Rated voltage                                                                                                                                                                                                     | V               | 230      |  |
| 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                                                                                                                                                                          |                 | 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       |  |