### DATASHEET - FAZT-C1/3N



Miniature circuit breaker (MCB), 1 A, 3p+N, characteristic: C



| Part no.          | FAZT-C1/3N |
|-------------------|------------|
| Catalog No.       | 241120     |
| Alternate Catalog | FAZT-C1/3N |
| No.               |            |
| EL-Nummer         | 1605689    |
| (Norway)          |            |

Similar to illustration

#### **Delivery program**

| Basic function                                  |                 |    | Miniature circuit-breakers                                     |
|---|-----------------|----|--|
| Number of poles                                 |                 |    | 3 pole+N   |
| Tripping characteristic                         |                 |    | C  |
| Application                                     |                 |    | Switchgear for industrial and advanced commercial applications |
| Rated current                                   | In              | А  | 1  |
| Rated switching capacity acc. to IEC/EN 60947-2 | I <sub>cu</sub> | kA | 25   |
| Product range                                   |                 |    | FAZ-T  |

### **Technical data**

| Electrical  |                 |                 |   |
|---|-----------------|-----------------|---|
| Standards   |                 |                 | IEC/EN 60947-2  |
| Rated voltage according to IEC/EN 60947-2   | Un              | V AC            | 415   |
| Rated switching capacity acc. to IEC/EN 60947-2   | I <sub>cu</sub> | kA              | 25  |
| Rated service short-circuit breaking capacity according to IEC/EN 60947-2                           | I <sub>cs</sub> |                 | 12,5 kA   |
| Max operational voltage according to IEC/EN 60947-2   |                 | V AC            | 440   |
| Rated switching capacity according to IEC/EN 60947-2 (max operational voltage)                      | l <sub>cu</sub> | kA              | 15  |
| Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) | I <sub>cs</sub> |                 | 7,5 kA  |
| Max operational voltage DC according to IEC/EN 60947-2  |                 | V DC            | 60/pole   |
| Rated voltage according to IEC/EN 60898-1   | Un              | V AC            | 415   |
| Rated switching capacity according to IEC/EN 60898-1  | I <sub>cn</sub> | kA              | 15  |
| Rated service short-circuit breaking capacity according to IEC/EN 60898-1                           | I <sub>cs</sub> |                 | 7,5 kA  |
| Rated insulation voltage  | Ui              | V               | 440   |
| Rated frequency   | f               | Hz              | 50/60   |
| Characteristic  |                 |                 | B, C, D   |
| Direction of incoming supply  |                 |                 | as required   |
| lifespan  |                 |                 |   |
| Electrical  | Operations      |                 | ≧ 4000  |
| Mechanical  | Operations      |                 | ≧ 10000   |
| Mechanical  |                 |                 |   |
| Standard front dimension  |                 | mm              | 45  |
| Enclosure height  |                 | mm              | 80  |
| Mounting width per pole   |                 | mm              | 17.5  |
| Mounting  |                 |                 | Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715 |
| Degree of Protection  |                 |                 | IP20  |
| Terminals top and bottom  |                 |                 | Twin-purpose terminals  |
| Terminal protection   |                 |                 | Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6       |
| Terminal capacities   |                 | mm <sup>2</sup> | 1 - 25  |
| Tightening torque of fixing screws  |                 | N/m             | max. 2.4  |
| Thickness of busbar material  |                 | mm              | 0.8 (exept N 0.5 SU)  |
| Mounting position   |                 |                 | As required   |

## Design verification as per IEC/EN 61439

Technical data for design verification

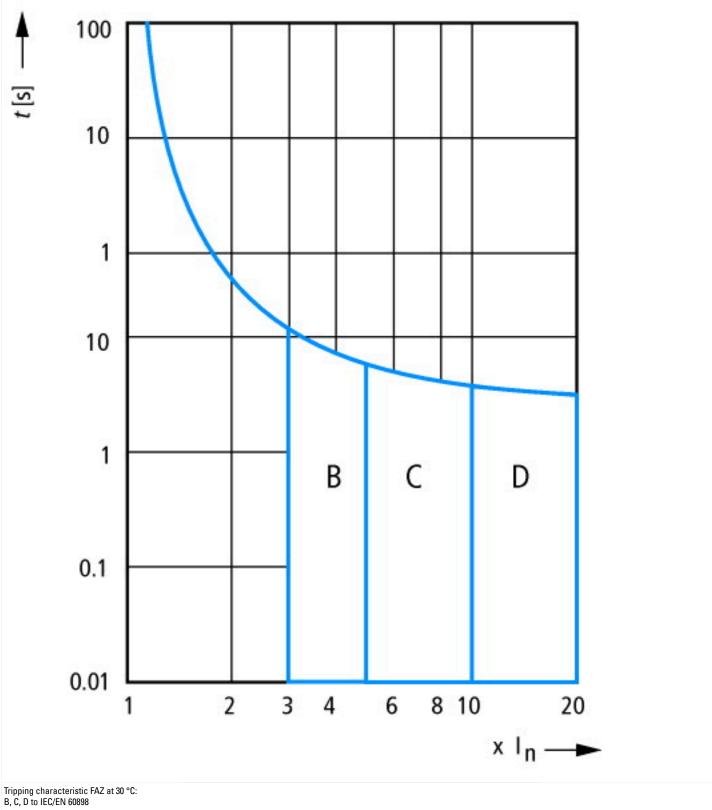
| Rated operational current for specified heat dissipation  | In                | А  | 1  |
|---|-------------------|----|--|
| Heat dissipation per pole, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Equipment heat dissipation, current-dependent   | P <sub>vid</sub>  | W  | 4.8  |
| Static heat dissipation, non-current-dependent  | P <sub>vs</sub>   | W  | 0  |
| Heat dissipation capacity   | P <sub>diss</sub> | W  | 0  |
| Operating ambient temperature min.  | 4.00              | °C | -40  |
| Operating ambient temperature max.  |                   | °C | 75   |
|   |                   |    | linear, per +1 °C, results in a 0.5% reduction of current carrying capacity  |
| C/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<br>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 b observed.                                    |
| 10.12 Electromagnetic compatibility   |                   |    | Is the panel builder's responsibility. The specifications for the switchgear must b observed.                                    |
| 10.13 Mechanical function   |                   |    | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

#### **Technical data ETIM 7.0**

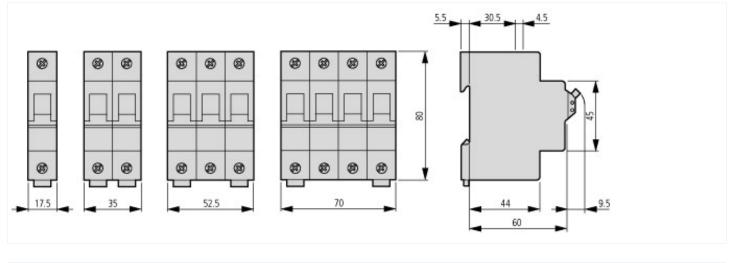
Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042) Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014]) С Release characteristic Number of poles (total) 4 3 Number of protected poles Rated current А 1 Rated voltage ٧ 230 ٧ 440 Rated insulation voltage Ui Rated impulse withstand voltage Uimp kV 4 Rated short-circuit breaking capacity Icn EN 60898 at 230 V kA 15 Rated short-circuit breaking capacity Icn EN 60898 at 400 V kA 15 Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V kA 25 Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V kA 25 AC Voltage type Frequency Hz 50 - 60 Current limiting class 3 Suitable for flush-mounted installation No

| Concurrently switching N-neutral                |     | Yes      |
|---|-----|----------|
| Over voltage category                           |     | 3        |
| Pollution degree                                |     | 2        |
| Additional equipment possible                   |     | Yes      |
| Width in number of modular spacings             |     | 4        |
| Built-in depth                                  | mm  | 70.5     |
| 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   |

### **Characteristics**



### **Dimensions**



# Additional product information (links)

Temperature dependency, derating

https://www.eaton.com/content/dam/eaton/technicaldocumentation/technical-data-tables/Derating table FAZ\_T.pdf