


**Miniature circuit breaker (MCB), 1A, 3Np, D-Char, AC**


**Part no.** FAZT-D1/3N  
**Catalog No.** 241180  
**Eaton Catalog No.** FAZT-D1/3N  
**EL-Nummer** 0001691461  
**(Norway)**

Similar to illustration

**Technical data**
**Electrical**

|                                                 |            |      |                |
|-------------------------------------------------|------------|------|----------------|
| Standards                                       |            |      | IEC/EN 60947-2 |
| Rated voltage according to IEC/EN 60947-2       | $U_n$      | V AC | 240/415        |
| Rated switching capacity acc. to IEC/EN 60947-2 | $I_{cu}$   | kA   | 25             |
| Rated insulation voltage                        | $U_i$      | V    | 440            |
| Rated frequency                                 | f          | Hz   | 50/60          |
| Characteristic                                  |            |      | B, C, D        |
| Direction of incoming supply                    |            |      | as required    |
| lifespan                                        |            |      |                |
| Electrical                                      | Operations |      | $\geq 4000$    |
| Mechanical                                      | Operations |      | $\geq 10000$   |

**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 (except 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                                                               | $I_n$      | A  | 1                                                                           |
| Heat dissipation per pole, current-dependent                                                                           | $P_{vid}$  | W  | 0                                                                           |
| Equipment heat dissipation, current-dependent                                                                          | $P_{vid}$  | W  | 2.5                                                                         |
| 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                                                                                            |            |    |                                                                             |
| 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.                         |

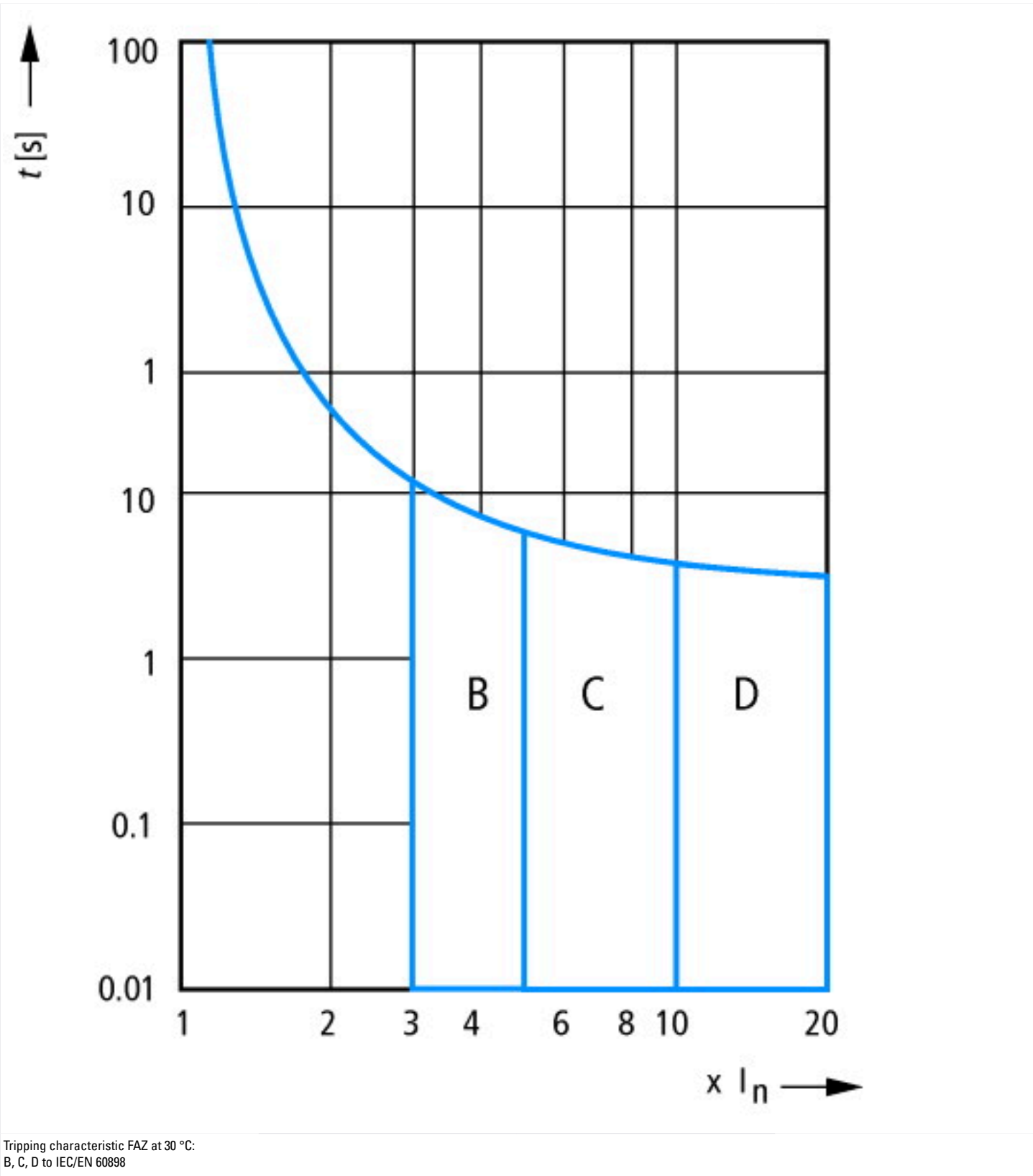
## Technical data ETIM 7.0

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)  
(ecI@ss10.0.1-27-14-19-01 [AAB905014])

|                                                                |                 |          |
|----------------------------------------------------------------|-----------------|----------|
| Release characteristic                                         |                 | D        |
| Number of poles (total)                                        |                 | 4        |
| Number of protected poles                                      |                 | 3        |
| Rated current                                                  | A               | 1        |
| Rated voltage                                                  | V               | 230      |
| Rated insulation voltage Ui                                    | V               | 440      |
| 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       |
| Voltage type                                                   |                 | AC       |
| 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                | mm <sup>2</sup> | 1 - 25   |
| Connectable conductor cross section solid-core                 | mm <sup>2</sup> | 1 - 25   |

Characteristics



## Dimensions

