



## Miniature circuit breaker (MCB), 40A, 2p, B-Char, AC

Part no. **FAZT-B40/2**  
 Catalog No. **142486**  
 Eaton Catalog No. **FAZT-B40/2**

Similar to illustration

## Technical data

### Electrical

|   |            |      |                |
|---|------------|------|----------------|
| Standards   |            |      | IEC/EN 60947-2 |
| Rated voltage according to IEC/EN 60947-2   | $U_n$      | V AC | 415            |
| Rated switching capacity acc. to IEC/EN 60947-2   | $I_{cu}$   | kA   | 20             |
| Rated service short-circuit breaking capacity according to IEC/EN 60947-2                           | $I_{cs}$   |      | 10 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)                      | $I_{cu}$   | kA   | 15             |
| Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) | $I_{cs}$   |      | 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   | $U_n$      | V AC | 415            |
| Rated switching capacity according to IEC/EN 60898-1  | $I_{cn}$   | kA   | 15             |
| Rated service short-circuit breaking capacity according to IEC/EN 60898-1                           | $I_{cs}$   |      | 7,5 kA         |
| 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 |      | ≥ 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 (except N 0.5 SU)   |
| Mounting position                  |  |                 | As required   |

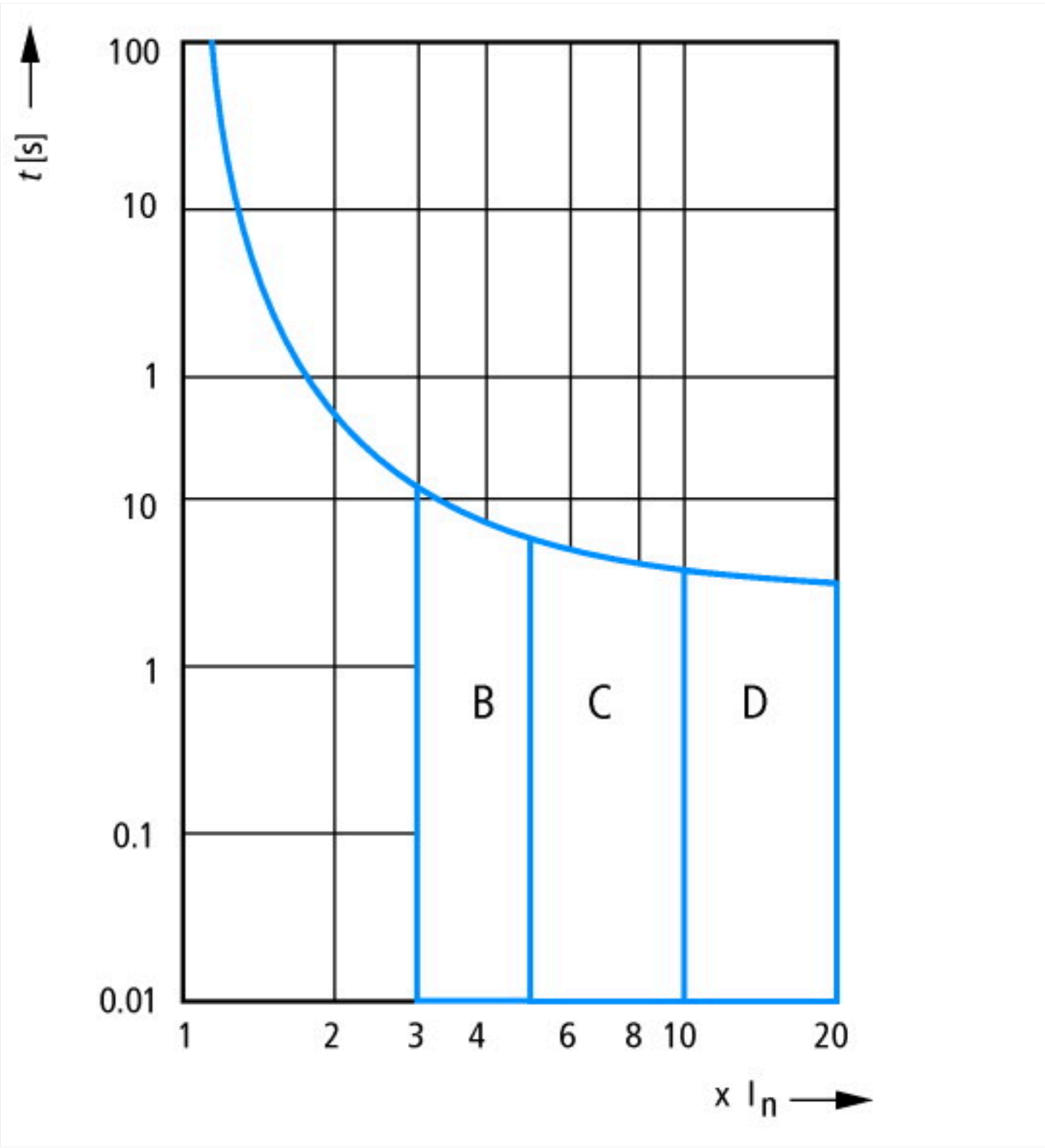
## Design verification as per IEC/EN 61439

|  |            |    |   |
|--|------------|----|---|
| Technical data for design verification                   |            |    |   |
| Rated operational current for specified heat dissipation | $I_n$      | A  | 40  |
| Heat dissipation per pole, current-dependent             | $P_{vid}$  | W  | 0   |
| Equipment heat dissipation, current-dependent            | $P_{vid}$  | W  | 7.5   |
| 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 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  |  |                 | B        |
| Number of poles (total)   |  |                 | 2        |
| Number of protected poles   |  |                 | 2        |
| Rated current   |  | A               | 40       |
| 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              | 10       |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V   |  | kA              | 10       |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V  |  | kA              | 15       |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V  |  | kA              | 15       |
| Voltage type  |  |                 | AC       |
| Frequency   |  | Hz              | 50 - 60  |
| Current limiting class  |  |                 | 3        |
| Suitable for flush-mounted installation   |  |                 | No       |
| Concurrently switching N-neutral  |  |                 | No       |
| Over voltage category   |  |                 | 3        |
| Pollution degree  |  |                 | 2        |
| Additional equipment possible   |  |                 | Yes      |
| Width in number of modular spacings   |  |                 | 2        |
| 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   |



## Dimensions

