

## Miniature circuit breaker (MCB), 20 A, 4p, characteristic: B

**Part no.** FAZ-B20/4  
**Catalog No.** 279036  
**Alternate Catalog No.** FAZ-B20/4  
**EL-Nummer (Norway)** 1695134

Similar to illustration

## Delivery program

|                                                 |                 |    |                                                                |
|-------------------------------------------------|-----------------|----|----------------------------------------------------------------|
| Basic function                                  |                 |    | Miniature circuit-breakers                                     |
| Number of poles                                 |                 |    | 4 pole                                                         |
| Tripping characteristic                         |                 |    | B                                                              |
| Application                                     |                 |    | Switchgear for industrial and advanced commercial applications |
| Rated current                                   | I <sub>n</sub>  | A  | 20                                                             |
| Rated switching capacity acc. to IEC/EN 60947-2 | I <sub>cu</sub> | kA | 15                                                             |
| Product range                                   |                 |    | FAZ                                                            |

## Technical data

## Electrical

|                                                                                                     |                 |         |                       |
|-----------------------------------------------------------------------------------------------------|-----------------|---------|-----------------------|
| Standards                                                                                           |                 |         | EN 45545-2; IEC 61373 |
| Rated operational voltage                                                                           | U <sub>e</sub>  | V       |                       |
|                                                                                                     | U <sub>e</sub>  | V AC    | 240/415               |
|                                                                                                     |                 | V DC    | 60 (per pole)         |
| Rated voltage according to UL                                                                       | U <sub>n</sub>  | V AC    | 480Y/277              |
| Rated switching capacity acc. to IEC/EN 60947-2                                                     | I <sub>cu</sub> | kA      | 15                    |
| Breaking capacity according to UL                                                                   |                 | kA      | 10 (UL1077)           |
| 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 <sub>cu</sub> | kA      | 10                    |
| Rated service short-circuit breaking capacity according to IEC/EN 60947-2 (max operational voltage) | I <sub>cs</sub> |         | 7,5 kA                |
| Rated voltage according to IEC/EN 60898-1                                                           | U <sub>n</sub>  | V AC    | 415                   |
| Rated switching capacity according to IEC/EN 60898-1                                                | I <sub>cn</sub> | kA      | 10                    |
| Rated service short-circuit breaking capacity according to IEC/EN 60898-1                           | I <sub>cs</sub> |         | 7,5 kA                |
| Operational switching capacity                                                                      |                 | kA      | 7.5                   |
| Characteristic                                                                                      |                 |         | B, C, D, K, S, Z      |
| Max. back-up fuse                                                                                   |                 | A gL/gG | 125                   |
| Selectivity Class                                                                                   |                 |         | 3                     |
| lifespan                                                                                            |                 |         |                       |
| Lifespan                                                                                            | Operations      |         | > 10000               |
| Direction of incoming supply                                                                        |                 |         | as required           |

## Mechanical

|                          |  |                 |                                         |
|--------------------------|--|-----------------|-----------------------------------------|
| Standard front dimension |  | mm              | 45                                      |
| Enclosure height         |  | mm              | 80                                      |
| Mounting width per pole  |  | mm              | 17.5                                    |
| Mounting                 |  |                 | IEC/EN 60715 top-hat rail               |
| Degree of Protection     |  |                 | IP20, IP40 (when fitted)                |
| Terminals top and bottom |  |                 | Twin-purpose terminals                  |
| Terminal protection      |  |                 | Finger and back-of-hand proof to BGV A2 |
| Terminal capacities      |  | mm <sup>2</sup> |                                         |
|                          |  | mm <sup>2</sup> | 1 x 25                                  |
|                          |  | mm <sup>2</sup> | 2 x 10                                  |

|                              |  |    |             |
|------------------------------|--|----|-------------|
| Thickness of busbar material |  | mm | 0.8 ... 2   |
| Mounting position            |  |    | As required |

## Design verification as per IEC/EN 61439

|                                                          |                   |    |                                                                             |
|----------------------------------------------------------|-------------------|----|-----------------------------------------------------------------------------|
| Technical data for design verification                   |                   |    |                                                                             |
| Rated operational current for specified heat dissipation | I <sub>n</sub>    | A  | 20                                                                          |
| Heat dissipation per pole, current-dependent             | P <sub>vid</sub>  | W  | 0                                                                           |
| Equipment heat dissipation, current-dependent            | P <sub>vid</sub>  | W  | 12.8                                                                        |
| 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.                       |                   | °C | -40                                                                         |
| Operating ambient temperature max.                       |                   | °C | 75                                                                          |
|                                                          |                   |    | linear, per +1 °C, results in a 0.5% reduction of current carrying capacity |

## 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)<br>(ecI@ss10.0.1-27-14-19-01 [AAB905014]) |  |                 |          |
| Built-in depth                                                                                                                                                                                                       |  | mm              | 70.5     |
| Release characteristic                                                                                                                                                                                               |  |                 | B        |
| Number of poles (total)                                                                                                                                                                                              |  |                 | 4        |
| Number of protected poles                                                                                                                                                                                            |  |                 | 4        |
| Rated current                                                                                                                                                                                                        |  | A               | 20       |
| Rated voltage                                                                                                                                                                                                        |  | V               | 400      |
| Rated insulation voltage U <sub>i</sub>                                                                                                                                                                              |  | V               | 440      |
| Rated impulse withstand voltage U <sub>imp</sub>                                                                                                                                                                     |  | kV              | 4        |
| Rated short-circuit breaking capacity I <sub>cn</sub> according to EN 60898 at 230 V                                                                                                                                 |  | kA              | 10       |
| Voltage type                                                                                                                                                                                                         |  |                 | AC       |
| Rated short-circuit breaking capacity I <sub>cn</sub> according to EN 60898 at 400 V                                                                                                                                 |  | kA              | 10       |
| Rated short-circuit breaking capacity I <sub>cu</sub> according to IEC 60947-2 at 230 V                                                                                                                              |  | kA              | 15       |
| Rated short-circuit breaking capacity I <sub>cu</sub> 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                                                                                                                                                                                  |  |                 | 4        |
| 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       |