

## DATASHEET - FAZ-B25/2



## Miniature circuit breaker (MCB), 25A, 2p, B-Char, AC

**Part no.** FAZ-B25/2  
**Catalog No.** 278736  
**Alternate Catalog No.** FAZ-B25/2  
**EL-Nummer (Norway)** 0001695115



Similar to illustration

## Delivery program

|   |          |    |  |
|---|----------|----|--|
| Basic function                                  |          |    | Miniature circuit-breakers                                     |
| Number of poles                                 |          |    | 2 pole   |
| Tripping characteristic                         |          |    | B  |
| Application                                     |          |    | Switchgear for industrial and advanced commercial applications |
| Rated current                                   | $I_n$    | A  | 25   |
| Rated switching capacity acc. to IEC/EN 60947-2 | $I_{cu}$ | kA | 15   |
| Product range                                   |          |    | FAZ  |

## Technical data

## Electrical

|   |            |         |                                |
|---|------------|---------|--------------------------------|
| Standards   |            |         | IEC/EN 60947-2<br>IEC/EN 60898 |
| Rated operational voltage   | $U_e$      | V       |                                |
|   | $U_e$      | V AC    | 240/415                        |
|   |            | V DC    | 60 (per pole)                  |
| Rated voltage according to UL   | $U_n$      | V AC    | 480Y/277                       |
| 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    | 440                            |
| 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    | 415                            |
| 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                         |
| 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   | $I_n$      | A  | 25   |
| Heat dissipation per pole, current-dependent   | $P_{vid}$  | W  | 0  |
| Equipment heat dissipation, current-dependent  | $P_{vid}$  | W  | 6.4  |
| 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) (ecl@ss10.0.1-27-14-19-01 [AAB905014]) |  |    |     |
| Release characteristic  |  |    | B   |
| Number of poles (total)   |  |    | 2   |
| Number of protected poles   |  |    | 2   |
| Rated current   |  | A  | 25  |
| Rated voltage   |  | V  | 400 |
| Rated insulation voltage $U_i$  |  | V  | 440 |
| Rated impulse withstand voltage $U_{imp}$   |  | kV | 4   |
| Rated short-circuit breaking capacity $I_{cn}$ EN 60898 at 230 V  |  | kA | 10  |
| Rated short-circuit breaking capacity $I_{cn}$ EN 60898 at 400 V  |  | kA | 10  |
| Rated short-circuit breaking capacity $I_{cu}$ 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   |

## Approvals

|                                  |  |  |
|----------------------------------|--|--|
| Product Standards                |  | IEC/EN 60947-2; IEC/EN 60898; UL 1077; CSA-C22.2 No. 235; CE marking |
| UL File No.                      |  | E177451  |
| UL Category Control No.          |  | QVNU2, QVNU8   |
| CSA File No.                     |  | 204453   |
| CSA Class No.                    |  | 3215-30  |
| North America Certification      |  | UL recognized, CSA certified   |
| Conditions of Acceptability      |  | Supplementary Protector only   |
| Suitable for                     |  | Branch Circuits; not as BCPD   |
| Current Limiting Circuit-Breaker |  | No   |
| Max. Voltage Rating              |  | 480Y/277 VAC; 96 VDC   |
| Degree of Protection             |  | IEC: IP20; UL/CSA Type: -  |

Characteristics



Let-through energy  $i^2t$   
According to IEC/EN 60898









Tripping characteristic at 30 °C:  
 B, C, D to IEC/EN 60898

Dimensions





# SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

# [www.scatts.co.uk](http://www.scatts.co.uk)