## DATASHEET - FAZ-C25/1-RT

No.

Miniature circuit breaker (MCB), 25 A, 1p, characteristic: C



FAZ-C25/1-RT Part no. Catalog No. 102132 Alternate Catalog FAZ-C25/1-RT **EL-Nummer** 1691788 (Norway)



#### **Delivery program**

| Basic function                                  |                 |    | Miniature circuit-breakers                                     |
|---|-----------------|----|--|
| Number of poles                                 |                 |    | 1 pole   |
| Tripping characteristic                         |                 |    | C  |
| Application                                     |                 |    | Switchgear for industrial and advanced commercial applications |
| Rated current                                   | In              | А  | 25   |
| Rated switching capacity acc. to IEC/EN 60947-2 | l <sub>cu</sub> | kA | 15   |
| Product range                                   |                 |    | FAZ-RT   |

#### **Technical data** Flectrical

| Electrical                                      |                 |      |   |
|---|-----------------|------|---|
| Standards                                       |                 |      | UL 489, CSA C22.2 No. 5<br>IEC 60947-2  |
| Rated operational voltage                       | Ue              | V    |   |
|   | Ue              | V AC | 277/480 Y   |
|   |                 | V DC | 60  |
| Rated voltage according to IEC/EN 60947-2       | Un              | V AC | 254   |
| Rated voltage according to UL                   | Un              | V AC | 277   |
| Rated switching capacity acc. to IEC/EN 60947-2 | l <sub>cu</sub> | kA   | 15  |
| Breaking capacity according to UL               |                 | kA   | 14 (UL489)  |
| Characteristic                                  |                 |      | B, C, D   |
| Selectivity Class                               |                 |      | 3   |
| lifespan  |                 |      |   |
| Lifespan  | Operations      |      | > 20000   |
| Direction of incoming supply                    |                 |      | as required   |
| Mechanical                                      |                 |      |   |
| Standard front dimension                        |                 | mm   | 45  |
| Enclosure height                                |                 | mm   | 105   |
| Mounting width per pole                         |                 | mm   | 17.7  |
| 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   |
| Tightening torque of fixing screws              |                 | N/m  | max. 2.4<br>UL:<br>#18-12 AWG: 2.4 Nm (21 lb-in)<br>#10-8 AWG: 2.8 Nm (25 lb-in)<br>#6 AWG: 4 Nm (36 lb-in) |
| 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>   | А | 25 |
| Heat dissipation per pole, current-dependent             | P <sub>vid</sub> | W | 0  |

| Equipment heat dissipation, current-dependent   | P <sub>vid</sub>  | W  | 3.1  |
|---|-------------------|----|--|
| Static heat dissipation, non-current-dependent  | P <sub>vs</sub>   | W  | 0  |
| Heat dissipation capacity   | P <sub>diss</sub> | W  | 0  |
|   | ' diss            | °C | -25  |
| Operating ambient temperature min.  |                   | °C | -23  |
| Operating ambient temperature max.  |                   | °С |  |
|   |                   |    | 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<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 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)

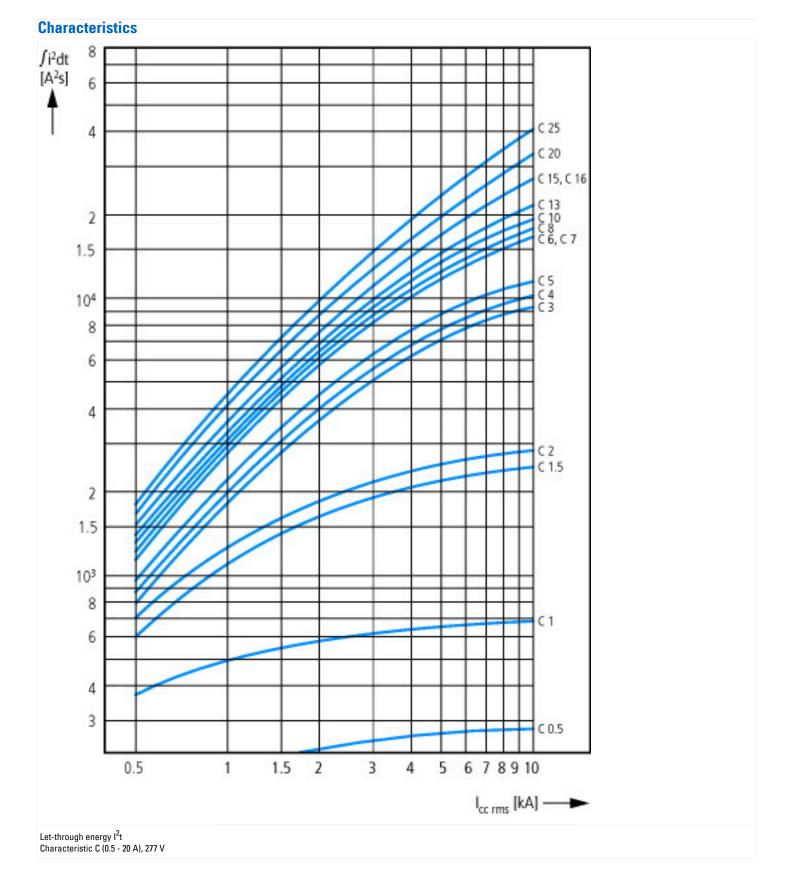
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

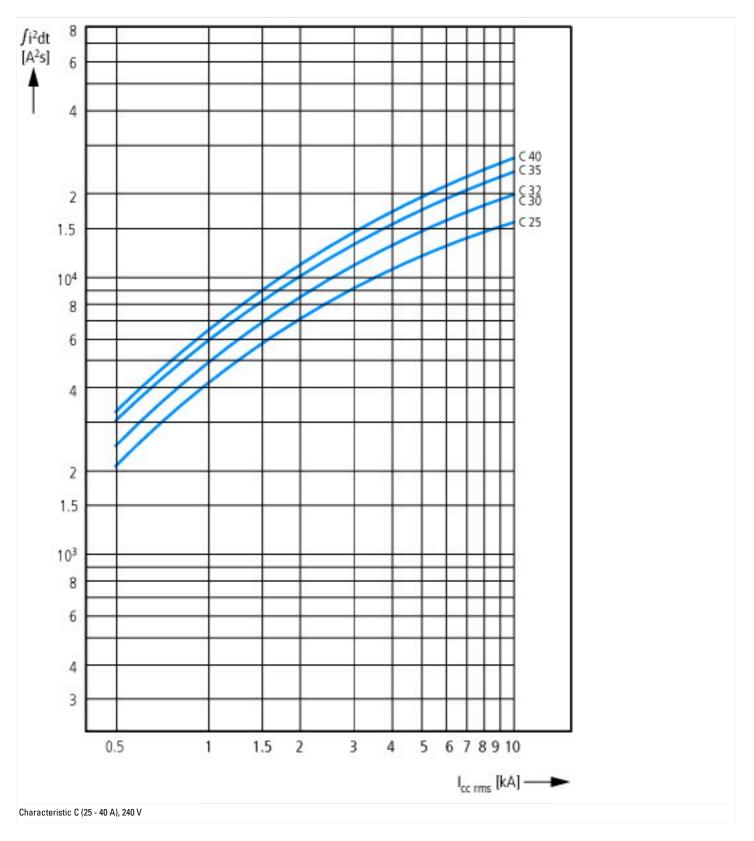
| (eci@ss10.0.1-27-14-19-01 [AAB905014])                         |    |         |
|--|----|---------|
| Release characteristic   |    | С       |
| Number of poles (total)  |    | 1       |
| Number of protected poles                                      |    | 1       |
| Rated current  | А  | 25      |
| Rated voltage  | V  | 240     |
| 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 | 0       |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V    | kA | 0       |
| 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             |     | 1        |
| 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   |

## **Approvals**

| Product Standards                    | IEC/EN 60947-2; EN 45545-2; IEC 61373; UL 489; CSA-C22.2 No. 5-09; CE marking |
|--------------------------------------|---|
| UL File No.                          | E235139   |
| UL Category Control No.              | DIVQ  |
| CSA File No.                         | 204453  |
| CSA Class No.                        | 1432-01   |
| North America Certification          | UL listed, CSA certified  |
| Specially designed for North America | Yes, suitable as BCPD   |
| Suitable for                         | Feeder circuits, branch circuits  |
| Current Limiting Circuit-Breaker     | Yes   |
| Max. Voltage Rating                  | ≤ 32 A  |
| Degree of Protection                 | IEC: IP20, UL/CSA Type: -   |
|                                      |   |





# Additional product information (links)

Temperature dependency, derating

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