# **DATASHEET - MMC6-B32/3**



## Miniature circuit breaker (MCB), 32 A, 3p, characteristic: B

Powering Business Worldwide\*

Part no. mMC6-B32/3 Catalog No. 139068

| livery |  |  |
|--------|--|--|

| Basic function                                       |                 |    | Miniature circuit-breakers                             |
|--|-----------------|----|--|
| Number of poles                                      |                 |    | 3 pole   |
| Tripping characteristic                              |                 |    | В  |
| Application  |                 |    | Switchgear for residential and commercial applications |
| Rated current  | In              | Α  | 32   |
| Rated switching capacity according to IEC/EN 60898-1 | I <sub>cn</sub> | kA | 6  |
| Product range  |                 |    | mMC6   |

### **Technical data**

#### **Electrical**

| Rated switching capacity according to IEC/EN 60898-1 | I <sub>cn</sub>  | kA | 6       |
|--|------------------|----|---------|
| Rated insulation voltage                             | Ui               | V  | 440     |
| Rated impulse withstand voltage                      | U <sub>imp</sub> | kV | 4       |
| lifespan   |                  |    |         |
| Electrical   | Operations       |    | ≧ 10000 |
| Mechanical   | Operations       |    | ≧ 20000 |
| References   |                  |    |         |
|  |                  |    |         |

| Auxiliary switch for subsequent installation        | ZP-IHK 286052       |
|---|---------------------|
| Tripping signal contact for subsequent installation | ZP-NHK 248437       |
| Remote control and automatic switching device       | Z-FW/LP 248296      |
| Switching interlock                                 | Z-IS/SPE-1TE 274418 |

#### Mechanical

| Standard front dimension     | mm | 45  |
|------------------------------|----|---|
| Device height                | mm | 80  |
| Mounting                     |    | Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715 |
| Degree of Protection         |    | IP20  |
| Terminals top and bottom     |    | Open mouthed/lift terminals   |
| Terminal protection          |    | BGV A3, ÖVE-EN 6  |
| Thickness of busbar material | mm | 0.8 - 2   |

# Design verification as per IEC/EN 61439

| · · · · · · · · · · · · · · · · · · ·  |                   |    |   |
|--|-------------------|----|---|
| Technical data for design verification   |                   |    |   |
| Rated operational current for specified heat dissipation   | In                | Α  | 32  |
| Heat dissipation per pole, current-dependent   | P <sub>vid</sub>  | W  | 0   |
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub>  | W  | 12.1  |
| 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 | -25   |
| 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])

| (eci@5510.0.1-27-14-15-01 [AAD505014])                         |     |          |
|--|-----|----------|
| Release characteristic   |     | В        |
| Number of poles (total)  |     | 3        |
| Number of protected poles                                      |     | 3        |
| Rated current  | Α   | 32       |
| 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  | 6        |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V    | kA  | 6        |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | kA  | 10       |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | kA  | 10       |
| 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                            |     | 3        |
| 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   |
|  |     |          |