## DATASHEET - BZME1-1-A50



Circuit-breaker, 1p, 50A

Part no. Catalog No.

BZME1-1-A50 166255



Similar to illustration

## Design verification as per IEC/EN 61439

| Technical data for design verification   |                  |   |  |
|--|------------------|---|--|
| Rated operational current for specified heat dissipation   | I <sub>n</sub>   | А | 50   |
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub> | W | 13.3   |
| 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**

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss10.0.1-27-37-04-09 [AJZ716013])

| Rated permanent current lu                                | A | 4  | 50        |
|---|---|----|-----------|
| Rated voltage   | V | /  | 240 - 240 |
| Rated short-circuit breaking capacity Icu at 400 V, 50 Hz | k | κA | 18        |
| Overload release current setting                          | A | 4  | 0 - 0     |
| Adjustment range short-term delayed short-circuit release | A | 4  | 0 - 0     |

| Adjustment range undelayed short-circuit release        | A | 480 - 720                                |
|---|---|--|
| Integrated earth fault protection                       |   | No                                       |
| Type of electrical connection of main circuit           |   | Screw connection                         |
| Device construction                                     |   | Built-in device fixed built-in technique |
| Suitable for DIN rail (top hat rail) mounting           |   | No                                       |
| DIN rail (top hat rail) mounting optional               |   | No                                       |
| Number of auxiliary contacts as normally closed contact |   | 0  |
| Number of auxiliary contacts as normally open contact   |   | 0  |
| Number of auxiliary contacts as change-over contact     |   | 0  |
| With switched-off indicator                             |   | No                                       |
| With under voltage release                              |   | No                                       |
| Number of poles   |   | 1  |
| Position of connection for main current circuit         |   | Front side                               |
| Type of control element                                 |   | Rocker lever                             |
| Complete device with protection unit                    |   | Yes                                      |
| Motor drive integrated                                  |   | No                                       |
| Motor drive optional                                    |   | No                                       |
| Degree of protection (IP)                               |   | IP20                                     |
|   |   |  |