

Miniature circuit breaker (MCB), 6A, 1p, type D characteristic

Part no. Catalog No. CLS6-D6-DP 270361



Similar to illustration

## Design verification as per IEC/EN 61439

| Technical data for design verification  |                   |    |  |
|---|-------------------|----|--|
| Rated operational current for specified heat dissipation  | In                | А  | 6  |
| Heat dissipation per pole, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Equipment heat dissipation, current-dependent   | P <sub>vid</sub>  | W  | 1.5  |
| 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 | 55   |
|   |                   |    | 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 6.0**

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@ss8.1-27-14-19-01 [AAB905011]) |   |  |  |  |
|--|---|--|--|--|
| Release characteristic   | D |  |  |  |
| Number of poles (total)  | 1 |  |  |  |
| Number of protected poles  | 1 |  |  |  |

| Nominal rated current  | А  | 6       |
|--|----|---------|
| Nominal rated voltage  | V  | 230     |
| 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 | 0       |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | kA | 0       |
| Voltage type   |    | AC      |
| Current limiting class   |    | 3       |
| Frequency  | Hz | 50 - 60 |
| Concurrently switching N-neutral                               |    | No      |
| Suitable for flush-mounted installation                        |    | No      |
| Over voltage category  |    | 3       |
| Pollution degree   |    | 2       |
| Width in number of modular spacings                            |    | 1       |
| Built-in depth   | mm | 70.5    |
| Additional equipment possible                                  |    | Yes     |
| Degree of protection (IP)                                      |    | IP20    |
|  |    |         |