



Miniature circuit breaker (MCB), 40 A, 1p, characteristic: B



Part no. CLS4-B40-DE
Catalog No. 247833

Similar to illustration

Design verification as per IEC/EN 61439

| Technical data for design verification | | | | |
|--|------------|----|--|---|
| Rated operational current for specified heat dissipation | I_n | A | | 40 |
| Heat dissipation per pole, current-dependent | P_{vid} | W | | 0 |
| Equipment heat dissipation, current-dependent | P_{vid} | W | | 3.4 |
| Static heat dissipation, non-current-dependent | P_{vs} | W | | 0 |
| Heat dissipation capacity | P_{diss} | 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 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

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|---|--|--|--|---|
| 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) (ec1@ss10.0.1-27-14-19-01 [AAB905014]) | | | | |
| Release characteristic | | | | B |

| | | |
|--|-----------------|----------|
| Number of poles (total) | | 1 |
| Number of protected poles | | 1 |
| Rated current | A | 40 |
| 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 | 4.5 |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V | kA | 4.5 |
| 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 |
| 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 - 55 |
| Connectable conductor cross section multi-wired | mm ² | 1 - 25 |
| Connectable conductor cross section solid-core | mm ² | 1 - 25 |