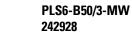
DATASHEET - PLS6-B50/3-MW

Part no. Catalog No.



Miniature circuit breaker (MCB), 50A, 3p, type B characteristic





Delivery program

| Derivery program | | | | |
|--|-------------------|----|--|--|
| Basic function | | | Miniature circuit-breakers | |
| Number of poles | | | 3 pole | |
| Tripping characteristic | | | В | |
| Application | | | Switchgear for residential and commercial applications | |
| Rated current | I _n | A | 50 | |
| Rated switching capacity according to IEC/EN 60898-1 | I _{cn} | kA | 6 | |
| Product range | | | PLS6 | |
| | | | | |
| Technical data | | | | |
| Electrical | | | | |
| Rated switching capacity according to IEC/EN 60898-1 | I _{cn} | kA | 6 | |
| | | | | |
| Design verification as per IEC/EN 61439 | | | | |
| Technical data for design verification | | | | |
| Rated operational current for specified heat dissipation | l _n | А | 50 | |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0 | |
| Equipment heat dissipation, current-dependent | P _{vid} | w | 14.9 | |
| Static heat dissipation, non-current-dependent | P _{vs} | w | 0 | |
| Heat dissipation capacity | | w | 0 | |
| | P _{diss} | | | |
| 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. | |
| | | | | |

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

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 (ecl@ss10.0.1-27-14-19-01 [AAB905014]) | n, device / Miniature cir | cuit breaker system (MCB) / Miniature circuit breaker (MCB) |
|--|---------------------------|---|
| Release characteristic | | В |
| Number of poles (total) | | 3 |
| Number of protected poles | | 3 |
| Rated current | А | 50 |
| Rated voltage | V | 400 |
| 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 | 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 | | 3 |
| Built-in depth | mm | 70.5 |
| Degree of protection (IP) | | IP20 |
| Ambient temperature during operating | °C | -25 - 55 |
| Connectable conductor cross section multi-wired | mm² | 1 - 25 |
| Connectable conductor cross section solid-core | mm² | 1 - 25 |
| | | |