

# Over current switch, 50A, 4p, type C characteristic

**Part no.** PLSM-C50/4-MW
**Article no.** 242617

Powering Business Worldwide

Similar to illustration

## Delivery program

| | | | |
|---|---|---|---|
| Basic function | | | Miniature circuit-breakers |
| Number of poles | | | 4 pole |
| Tripping characteristic | | | C |
| Application | | | Switchgear for residential and commercial applications |
| Rated current | $I_n$ | A | 50 |
| Rated switching capacity according to IEC/EN 60898-1 | | kA | 10 |
| Product range | | | PLSM |

## Design verification as per IEC/EN 61439

| | | | |
|---|---|---|---|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | $I_n$ | A | 50 |
| Heat dissipation per pole, current-dependent | $P_{vid}$ | W | 0 |
| Equipment heat dissipation, current-dependent | $P_{vid}$ | W | 18 |
| 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 | 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 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 | | C |
| Number of poles (total) | | 4 |
| Number of protected poles | | 4 |
| Nominal rated current | A | 50 |
| Nominal rated voltage | V | 400 |
| Rated short-circuit breaking capacity Icn EN 60898 at 230 V | kA | 10 |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V | kA | 10 |
| 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 | | Yes |
| Suitable for flush-mounted installation | | No |
| Over voltage category | | 3 |
| Pollution degree | | 2 |
| Width in number of modular spacings | | 4 |
| Built-in depth | mm | 70.5 |
| Additional equipment possible | | Yes |
| Degree of protection (IP) | | IP20 |


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