## **DATASHEET - PLSM-D20/2-MW**



Miniature circuit breaker (MCB), 20 A, 2p, characteristic: D

Part no. PLSM-D20/2-MW Catalog No. 242429

EL-Nummer (Norway)

1609244



Similar to illustration

| <b>D</b> |        |     |       |
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| belivery program                                     |                 |    |  |
|--|-----------------|----|--|
| Basic function                                       |                 |    | Miniature circuit-breakers                             |
| Number of poles                                      |                 |    | 2 pole   |
| Tripping characteristic                              |                 |    | D  |
| Application  |                 |    | Switchgear for residential and commercial applications |
| Rated current  | In              | Α  | 20   |
| Rated switching capacity according to IEC/EN 60898-1 | I <sub>cn</sub> | kA | 10   |
| Product range  |                 |    | PLSM   |

## **Technical data**

## Electrical

| Rated switching capacity according to IEC/EN 60898-1 | I <sub>cn</sub> | kA | 10 |  |  |  |  |
|--|-----------------|----|----|--|--|--|--|
|--|-----------------|----|----|--|--|--|--|

| Design verification as per IEC/EN 61439  |                   |    |  |
|--|-------------------|----|--|
| Technical data for design verification   |                   |    |  |
| Rated operational current for specified heat dissipation   | In                | Α  | 20   |
| Heat dissipation per pole, current-dependent   | P <sub>vid</sub>  | W  | 0  |
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub>  | W  | 4.1  |
| Static heat dissipation, non-current-dependent   | $P_{vs}$          | W  | 0  |
| Heat dissipation capacity  | P <sub>diss</sub> | 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 7.0**

| iecinnical data Ethiyi 7.0   |  |             |  |  |  |
|--|--|-------------|--|--|--|
| Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC00004   | Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042) |             |  |  |  |
| Electric engineering, automation, process control engineering / Electrical installa (ecl@ss10.0.1-27-14-19-01 [AAB905014]) | ition, device / Mir  | niature cir | rcuit breaker system (MCB) / Miniature circuit breaker (MCB) |  |  |
| Release characteristic   |  |             | D  |  |  |
| Number of poles (total)  |  |             | 2  |  |  |
| Number of protected poles  |  |             | 2  |  |  |
| Rated current  |  | Α           | 20   |  |  |
| 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          | 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   |  |  |
| 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  |  |             | 2  |  |  |
| Built-in depth   |  | mm          | 70.5   |  |  |
| Degree of protection (IP)  |  |             | IP20   |  |  |
| Ambient temperature during operating   |  | °C          | -25 - 75   |  |  |
| Connectable conductor cross section multi-wired  |  | mm²         | 1 - 25   |  |  |
| Connectable conductor cross section solid-core   |  | mm²         | 1 - 25   |  |  |