# **DATASHEET - PLSM-B20/2-MW**



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

PLSM-B20/2-MW Part no. Catalog No. 242380

**EL-Nummer** 

(Norway)

1609114



## **Delivery program**

| Basic function                                       |                 |    | Miniature circuit-breakers                             |
|--|-----------------|----|--|
| Number of poles                                      |                 |    | 2 pole   |
| Tripping characteristic                              |                 |    | В  |
| 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**

 $\mathrm{I}_{\mathrm{cn}}$ Rated switching capacity according to IEC/EN 60898-1 10

| In                | Α   | 20   |
|-------------------|---|--|
| P <sub>vid</sub>  | W   | 0  |
| P <sub>vid</sub>  | W   | 6.6  |
| $P_{vs}$          | W   | 0  |
| P <sub>diss</sub> | W   | 0  |
|                   | °C  | -25  |
|                   | °C  | 75   |
|                   |   | linear, per +1 °C, results in a 0.5% reduction of current carrying capacity  |
|                   |   |  |
|                   |   |  |
|                   |   | Meets the product standard's requirements.   |
|                   |   | Meets the product standard's requirements.   |
|                   |   | Meets the product standard's requirements.   |
|                   |   | Meets the product standard's requirements.   |
|                   |   | Meets the product standard's requirements.   |
|                   |   | Does not apply, since the entire switchgear needs to be evaluated.   |
|                   |   | Does not apply, since the entire switchgear needs to be evaluated.   |
|                   |   | Meets the product standard's requirements.   |
|                   |   | Does not apply, since the entire switchgear needs to be evaluated.   |
|                   |   | Meets the product standard's requirements.   |
|                   |   | Does not apply, since the entire switchgear needs to be evaluated.   |
|                   |   | Does not apply, since the entire switchgear needs to be evaluated.   |
|                   |   | Is the panel builder's responsibility.   |
|                   |   | Is the panel builder's responsibility.   |
|                   |   |  |
|                   |   | Is the panel builder's responsibility.   |
|                   |   | Is the panel builder's responsibility.   |
|                   |   | Is the panel builder's responsibility.   |
|                   |   | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
|                   |   | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
|                   | P <sub>vid</sub> P <sub>vid</sub> P <sub>vs</sub> | P <sub>vid</sub> W P <sub>vid</sub> W P <sub>vs</sub> W P <sub>diss</sub> W °C °C  |

| 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**

| es (EG000020) / Miniature |  |
|---------------------------|--|
|                           |  |
|                           |  |

Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB)

| Lumber of poles (total) Lumber of protected poles ated current ated voltage ated involtage Ui ated voltage Ui ated impulse withstand voltage Uimp ated short-circuit breaking capacity Icn EN 60898 at 230 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icn EE 60947-2 at 400 V ated short-circuit br | (ecl@ss10.0.1-27-14-19-01 [AAB905014])                         | acvice / iviiiiatare cii | cuit breaker system (Mob), Miniataire enealt breaker (Mob) |
|--|--|--------------------------|--|
| tumber of protected poles ated current ated voltage ated insulation voltage Ui ated insulation voltage Uimp ated short-circuit breaking capacity Icn EN 60898 at 230 V ated short-circuit breaking capacity Icn EN 60898 at 230 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icn EN 608947-2 at 230 V ated short-circuit breaking capacity Icn IEC 60947-2 at 400 V bitage type  AC  AC  AC  Bz  Bo - 60  AC  AC  AC  AC  AC  AC  AC  AC  AC  A  | Release characteristic   |                          | В  |
| ated current ated voltage ated insulation voltage Ui ated insulation voltage Uii ated insulation voltage Uiin ated impulse withstand voltage Uiinp ated short-circuit breaking capacity Icn EN 60898 at 230 V ated short-circuit breaking capacity Icn EN 60898 at 400 V ated short-circuit breaking capacity Icu EC 60947-2 at 230 V ated short-circuit breaking capacity Icu IEC 60947-2 at 230 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V bitage type arequency AC arequency AC arequency AC arequency AC arequency AC  | Number of poles (total)  |                          | 2  |
| ated voltage V 400 ated insulation voltage Uirip V 440 ated impulse withstand voltage Uirip KV 410 ated short-circuit breaking capacity Icn EN 60898 at 230 V KA 10 ated short-circuit breaking capacity Icn EN 60898 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 230 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 2400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V KA 10 ated short-circuit breaking capacity Icu IEC 609 | Number of protected poles                                      |                          | 2  |
| Add   1988   1   | Rated current  | Α                        | 20   |
| ated impulse withstand voltage Ulimp  kV 4  ated short-circuit breaking capacity Icn EN 60898 at 230 V kA 10  ated short-circuit breaking capacity Icn EN 60898 at 400 V kA 10  ated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 0  ated short-circuit breaking capacity Icn IEC 60947-2 at 230 V kA 0  ated short-circuit breaking capacity Icn IEC 60947-2 at 2400 V kA 0  oltage type  AC  requency  Hz 50 - 60  autitable for flush-mounted installation  oncurrently switching N-neutral  ver voltage category  ollution degree  diditional equipment possible  Vidth in number of modular spacings  vidth in number of modular spacings  vidth in depth  mm 70.5  egree of protection (IP)  mbient temperature during operating  v C 25 - 75  onesetable conductor cross section multi-wired  mm² 1-25   | Rated voltage  | V                        | 400  |
| ated short-circuit breaking capacity Icn EN 60898 at 230 V ated short-circuit breaking capacity Icu IEC 60947-2 at 230 V ated short-circuit breaking capacity Icu IEC 60947-2 at 230 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V bitage type  AC  requency AC  requency AC  requency AN  autiable for flush-mounted installation oncurrently switching N-neutral ver voltage category  allultion degree diditional equipment possible Vidth in number of modular spacings vidth in depth egree of protection (IP)  mbient temperature during operating one category  at an   | Rated insulation voltage Ui                                    | V                        | 440  |
| ated short-circuit breaking capacity Icu IEC 60947-2 at 230 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V ated short-circuit breaking capacity Icu IEC 60947-2 at 200 V  | Rated impulse withstand voltage Uimp                           | kV                       | 4  |
| ated short-circuit breaking capacity Icu IEC 60947-2 at 230 V ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V oltage type  requency  Hz 50 - 60  urrent limiting class  uitable for flush-mounted installation oncurrently switching N-neutral ver voltage category ollution degree diditional equipment possible Vidth in number of modular spacings  uith in depth egree of protection (IP)  mbient temperature during operating onnectable conductor cross section multi-wired  kA 0  c  d  AC  NC  NO  3  2  4  Pes  1  1  1  1  1  1  1  1  1  1  1  1  1   | Rated short-circuit breaking capacity Icn EN 60898 at 230 V    | kA                       | 10   |
| ated short-circuit breaking capacity Icu IEC 60947-2 at 400 V  oltage type  AC  requency  Hz  50 - 60  urrent limiting class  uitable for flush-mounted installation  oncurrently switching N-neutral  ver voltage category  ollution degree  diditional equipment possible  Vidth in number of modular spacings  uitt-in depth  egree of protection (IP)  mbient temperature during operating  onectable conductor cross section multi-wired  kA  0  AC  AC  No  No  No  No  No  2  2  4  Different memory modular spacings  provided memory m | Rated short-circuit breaking capacity Icn EN 60898 at 400 V    | kA                       | 10   |
| obtage type requency Hz 50 - 60 requency urrent limiting class uitable for flush-mounted installation oncurrently switching N-neutral ver voltage category ollution degree diditional equipment possible Vidth in number of modular spacings uithin depth egree of protection (IP) mbient temperature during operating onnectable conductor cross section multi-wired  AC  AC  AC  AC  Pa  50 - 60  No  No  No  Ver  Ver  2  2  2  4  7  7  8  Per  7  7  8  7  8  7  8  8  8  8  8  8  8  | Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | kA                       | 0  |
| requency Hz 50 - 60  urrent limiting class uitable for flush-mounted installation oncurrently switching N-neutral ver voltage category ollution degree diditional equipment possible Vidth in number of modular spacings uith-in depth egree of protection (IP) mbient temperature during operating onnectable conductor cross section multi-wired  Hz 50 - 60 No No No No  2 2 2 2 2 2 2 2 2 2 2 2 2  | Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | kA                       | 0  |
| urrent limiting class uitable for flush-mounted installation oncurrently switching N-neutral ver voltage category ollution degree diditional equipment possible Vidth in number of modular spacings uilt-in depth egree of protection (IP) mbient temperature during operating onnectable conductor cross section multi-wired  3  No No No No Ver Ves 2  diditional equipment possible Ves 2  uilt-in depth IP20 mbient temperature during operating onnectable conductor cross section multi-wired  mm² 1-25  | Voltage type   |                          | AC   |
| uitable for flush-mounted installation Oncurrently switching N-neutral Over voltage category Ollution degree Ollution degree Vidth in number of modular spacings Vidth in number of modular spacings Vidth in depth Once of protection (IP) Once of protection (IP) Once of protection of (IP) Once of protection multi-wired Once of protection mult | Frequency  | Hz                       | 50 - 60  |
| oncurrently switching N-neutral or ver voltage category ollution degree ollution degree ollution growth possible Vidth in number of modular spacings ver voltage category ollution degree of protection (IP) mm 70.5 regree of protection (IP) mbient temperature during operating onnectable conductor cross section multi-wired  No  No  1  2  1  1  1  1  1  1  1  1  1  1  1   | Current limiting class   |                          | 3  |
| ver voltage category  ollution degree  dditional equipment possible  Vidth in number of modular spacings  vertically a spacing a spa | Suitable for flush-mounted installation                        |                          | No   |
| ollution degree 2 dditional equipment possible Yes Vidth in number of modular spacings 2 utilt-in depth mm 70.5 legree of protection (IP) IP20 mbient temperature during operating °C -25 - 75 onnectable conductor cross section multi-wired mm² 1 - 25   | Concurrently switching N-neutral                               |                          | No   |
| dditional equipment possible  Vidth in number of modular spacings  vidth in depth  mm  70.5  regree of protection (IP)  mbient temperature during operating  "C"  -25 - 75  onnectable conductor cross section multi-wired  mm²  1 - 25  | Over voltage category  |                          | 3  |
| Vidth in number of modular spacings  valid-in depth  mm 70.5  degree of protection (IP)  mbient temperature during operating  °C -25 - 75  onnectable conductor cross section multi-wired  mm² 1 - 25  | Pollution degree   |                          | 2  |
| mm 70.5 legree of protection (IP) legree of  | Additional equipment possible                                  |                          | Yes  |
| regree of protection (IP)  IP20  Imbient temperature during operating  °C -25 - 75  onnectable conductor cross section multi-wired  IP20  mm² 1 - 25   | Width in number of modular spacings                            |                          | 2  |
| onnectable conductor cross section multi-wired  "C -25 - 75  mm² 1 - 25  | Built-in depth   | mm                       | 70.5   |
| onnectable conductor cross section multi-wired mm² 1 - 25  | Degree of protection (IP)                                      |                          | IP20   |
|  | Ambient temperature during operating                           | °C                       | -25 - 75   |
| onnectable conductor cross section solid-core mm² 1 - 25   | Connectable conductor cross section multi-wired                | mm²                      | 1 - 25   |
|  | Connectable conductor cross section solid-core                 | mm²                      | 1 - 25   |