

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



**Part no.** PLS6-C20/2-DC-MW  
**243136**  
**EL Number** 1609291  
**(Norway)**

| General specifications  |  |  |
|---|--|--|
| Product name  |  | Eaton Moeller series xPole - PLS6-DC MCB |
| Part no.  |  | PLS6-C20/2-DC-MW                         |
| EAN   |  | 4015082431365                            |
| Product Length/Depth  |  | 85 millimetre                            |
| Product height  |  | 73 millimetre                            |
| Product width   |  | 35 millimetre                            |
| Product weight  |  | 0.24 kilogram                            |
| Compliances   |  | RoHS conform                             |
| Certifications  |  | CE                                       |
| Product Tradename   |  | xPole - PLS6-DC                          |
| Product Type  |  | MCB                                      |
| Product Sub Type  |  | None                                     |
| Delivery program  |  |  |
| Application   |  | Switchgear for DC applications           |
| Number of poles   |  | Two-pole                                 |
| Number of poles (total)                                       |  | 2  |
| Number of poles (protected)                                   |  | 2  |
| Tripping characteristic                                       |  | C  |
| Release characteristic  |  | C  |
| Amperage Rating   |  | 20 A                                     |
| Type  |  | Miniature circuit breaker<br>PLS6        |
| Technical Data - Electrical                                   |  |  |
| Voltage type  |  | DC                                       |
| Rated operational voltage (Ue) - max                          |  | 220 V                                    |
| Rated insulation voltage (Ui)                                 |  | 440 V                                    |
| Rated impulse withstand voltage (Uimp)                        |  | 4 kV                                     |
| Frequency rating - min  |  | 0 Hz                                     |
| Frequency rating - max  |  | 0 Hz                                     |
| Rated switching capacity (IEC/EN 60947-2)                     |  | 6 kA                                     |
| Rated short-circuit breaking capacity (EN 60898) at 230 V     |  | 0 kA                                     |
| Rated short-circuit breaking capacity (EN 60898) at 400 V     |  | 0 kA                                     |
| Rated short-circuit breaking capacity (IEC 60947-2) at 230 V  |  | 10 kA                                    |
| Rated short-circuit breaking capacity (IEC 60947-2) at 400 V  |  | 10 kA                                    |
| Overvoltage category  |  | III                                      |
| Pollution degree  |  | 2  |
| Technical Data - Mechanical                                   |  |  |
| Width in number of modular spacings                           |  | 2  |
| Built-in depth  |  | 70.5 mm                                  |
| Degree of protection  |  | IP20                                     |
| Connectable conductor cross section (solid-core) - min        |  | 1 mm <sup>2</sup>                        |
| Connectable conductor cross section (solid-core) - max        |  | 25 mm <sup>2</sup>                       |
| Connectable conductor cross section (multi-wired) - min       |  | 1 mm <sup>2</sup>                        |
| Connectable conductor cross section (multi-wired) - max       |  | 25 mm <sup>2</sup>                       |
| Design verification as per IEC/EN 61439 - technical data      |  |  |
| Rated operational current for specified heat dissipation (In) |  | 20 A                                     |
| Heat dissipation per pole, current-dependent                  |  | 0 W                                      |

|  |  |  |
|--|--|--|
| Equipment heat dissipation, current-dependent                                    |  | 2.9 W  |
| Static heat dissipation, non-current-dependent                                   |  | 0 W  |
| Heat dissipation capacity  |  | 0 W  |
| Ambient operating temperature - min  |  | -25 °C   |
| Ambient operating temperature - max  |  | 75 °C  |
| <b>Design verification as per IEC/EN 61439</b>                                   |  |  |
| 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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.   |
| 10.9.2 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.                         |
| <b>Additional information</b>  |  |  |
| Current limiting class   |  | 3  |
| Features   |  | Additional equipment possible  |
| Special features   |  | Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity                        |
| Used with  |  | Miniature circuit breaker<br>PLS6  |

## Technical data ETIM 9.0

|   |    |       |
|---|----|-------|
| 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@ss13-27-14-19-01 [AAB905019]) |    |       |
| Built-in depth  | mm | 70.5  |
| Release characteristic  |    | C     |
| Number of poles (total)   |    | 2     |
| Number of protected poles   |    | 2     |
| Rated current   | A  | 20    |
| Rated voltage   | V  | 220   |
| Rated insulation voltage Ui   | V  | 440   |
| Rated impulse withstand voltage Uimp  | kV | 4     |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V  | kA | 0     |
| Voltage type  |    | DC    |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  | kA | 0     |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V   | kA | 10    |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   | kA | 10    |
| Frequency   | Hz | 0 - 0 |
| Power loss  | W  | 5.8   |

|   |  |                 |          |
|---|--|-----------------|----------|
| Current limiting class                          |  |                 | 3        |
| Flush-mounted installation                      |  |                 | No       |
| Concurrently switching neutral conductor        |  |                 | No       |
| Over voltage category                           |  |                 | 3        |
| Pollution degree                                |  |                 | 2        |
| Additional equipment possible                   |  |                 | Yes      |
| Width in number of modular spacings             |  |                 | 2        |
| Degree of protection (IP)                       |  |                 | IP20     |
| Ambient temperature during operating            |  | °C              | -25 - 75 |
| Connectable conductor cross section multi-wired |  | mm <sup>2</sup> | 1 - 25   |
| Connectable conductor cross section solid-core  |  | mm <sup>2</sup> | 1 - 25   |
| Explosion-proof                                 |  |                 | No       |