## Miniature circuit breaker (MCB), 2 A, 3p+N, characteristic: C



Part no. PL7-C2/3N 165271

| General specifications  |   |
|---|---|
| Product name  | Eaton Moeller series xPole - PL7 MCB  |
| Part no.  | PL7-C2/3N   |
| EAN   | 4015081617814   |
| Product Length/Depth  | 85 millimetre   |
| Product height  | 73 millimetre   |
| Product width   | 70 millimetre   |
| Product weight  | 0.48 kilogram   |
| Compliances   | RoHS conform  |
| Product Tradename   | xPole - PL7   |
| Product Type  | МСВ   |
| Product Sub Type  | None  |
| Delivery program  |   |
| Application   | Switchgear for residential and commercial applications xPole - Switchgear for residential and commercial applications |
| Number of poles   | Three-pole + N  |
| Number of poles (total)                                       | 4   |
| Number of poles (protected)                                   | 3   |
| Tripping characteristic                                       | С   |
| Release characteristic  | C   |
| Amperage Rating   | 2 A   |
| Туре  | Miniature circuit breaker<br>PL7  |
| Technical Data - Electrical                                   |   |
| Voltage type  | AC  |
| Rated operational voltage (Ue) - max                          | 230 V   |
| Rated insulation voltage (Ui)                                 | 440 V   |
| Rated impulse withstand voltage (Uimp)                        | 4 kV  |
| Frequency rating - min  | 50 Hz   |
| Frequency rating - max  | 60 Hz   |
| Rated switching capacity (IEC/EN 60898-1)                     | 10 kA   |
| Rated short-circuit breaking capacity (EN 60898) at 230 V     | 10 kA   |
| Rated short-circuit breaking capacity (EN 60898) at 400 V     | 10 kA   |
| Rated short-circuit breaking capacity (IEC 60947-2) at 230 V  | 0 kA  |
| Rated short-circuit breaking capacity (IEC 60947-2) at 400 V  | 0 kA  |
| Overvoltage category  |   |
| Pollution degree  | 2   |
| Technical Data - Mechanical                                   |   |
| Width in number of modular spacings                           | 4   |
| Built-in depth  | 69.5 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) | 2 A   |
| Heat dissipation per pole, current-dependent                  | 0 W   |
| Equipment heat dissipation, current-dependent                 | 4.3 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  |
| Design verification as per IEC/EN 61439  |  |
| 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.                         |
| dditional information  |  |
| Current limiting class   | 3  |
| Features   | Concurrently switching N-neutral 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  | PL7<br>Miniature circuit breaker   |

## **Technical data ETIM 8.0**

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@ss10.0.1-27-14-19-01 [AAB905014])

| Release characteristic  Number of poles (total)  Number of protected poles  Rated current  A 2  Rated voltage  V 230  Rated insulation voltage Uimp  Rated impulse withstand voltage Uimp  Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V  Voltage type  Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V | (eti@ss10.0.1-27-14-19-01 [AAD300014])                                      |    |         |
|---|---|----|---------|
| Number of poles (total)  Number of protected poles  Rated current  A 2  Rated voltage  V 230  Rated insulation voltage Ui  Rated impulse withstand voltage Uimp  Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V  Voltage type  Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  | Built-in depth  | mm | 69.5    |
| Number of protected poles  Rated current  A 2  Rated voltage  V 230  Rated insulation voltage Ui  Rated impulse withstand voltage Uimp  KV 440  Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V  Voltage type  Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  Rated short-circuit breaking capacity Icn according to IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   | Release characteristic  |    | C       |
| Rated current  Rated voltage  V 230  Rated insulation voltage Ui  Rated impulse withstand voltage Uimp  Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V  Voltage type  Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V   | Number of poles (total)   |    | 4       |
| Rated voltage  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 10  Voltage type  AC  Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V kA 10  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V kA 0  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 0  Frequency  Hz 50 - 60  | Number of protected poles   |    | 3       |
| Rated insulation voltage Ui  Rated impulse withstand voltage Uimp  kV 4  Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V kA 10  Voltage type  AC  Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V kA 10  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V kA 0  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 0  Frequency  Hz 50 - 60  | Rated current   | Α  | 2       |
| Rated impulse withstand voltage Uimp  kV 4  Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V kA 10  Voltage type  AC  Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V kA 10  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V kA 0  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 0  Frequency  Hz 50 - 60   | Rated voltage   | V  | 230     |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V  | Rated insulation voltage Ui   | V  | 440     |
| Voltage type  AC  Rated short-circuit breaking capacity Icu according to EN 60898 at 400 V kA 10  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V kA 0  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 0  Frequency  Hz 50 - 60   | Rated impulse withstand voltage Uimp  | kV | 4       |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V  | Rated short-circuit breaking capacity Icn according to EN 60898 at 230 V    | kA | 10      |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V kA 0  Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 0  Frequency Hz 50 - 60  | Voltage type  |    | AC      |
| Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V kA 0  Frequency Hz 50 - 60  | Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V    | kA | 10      |
| Frequency Hz 50 - 60  | Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 230 V | kA | 0       |
|   | Rated short-circuit breaking capacity Icu according to IEC 60947-2 at 400 V | kA | 0       |
| Current limiting class 3  | Frequency   | Hz | 50 - 60 |
|   | Current limiting class  |    | 3       |

| Flush-mounted installation                      |   |     | No       |
|---|---|-----|----------|
| Concurrently switching neutral conductor        |   |     | Yes      |
| Over voltage category                           |   |     | 3        |
| Pollution degree                                |   |     | 2        |
| Additional equipment possible                   |   |     | Yes      |
| Width in number of modular spacings             |   |     | 4        |
| Degree of protection (IP)                       |   |     | IP20     |
| Ambient temperature during operating            | o | °C  | -25 - 75 |
| Connectable conductor cross section multi-wired | r | mm² | 1 - 25   |
| Connectable conductor cross section solid-core  | r | mm² | 1 - 25   |
| Explosion-proof                                 |   |     | No       |