

Miniature circuit breaker (MCB), 16 A, 3p+N, characteristic: C



**Part no.** PLS6-C16/3N-MW  
243018

| General specifications                                        |  |                                                                                                                          |
|---------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------|
| Product name                                                  |  | Eaton Moeller series xPole - PLS6/M MCB                                                                                  |
| Part no.                                                      |  | PLS6-C16/3N-MW                                                                                                           |
| EAN                                                           |  | 4015082430184                                                                                                            |
| Product Length/Depth                                          |  | 85 millimetre                                                                                                            |
| Product height                                                |  | 73 millimetre                                                                                                            |
| Product width                                                 |  | 70 millimetre                                                                                                            |
| Product weight                                                |  | 0.456 kilogram                                                                                                           |
| Compliances                                                   |  | RoHS conform                                                                                                             |
| Product Tradename                                             |  | xPole - PLS6/M                                                                                                           |
| Product Type                                                  |  | MCB                                                                                                                      |
| Product Sub Type                                              |  | None                                                                                                                     |
| Delivery program                                              |  |                                                                                                                          |
| Application                                                   |  | Switchgear for residential and commercial applications<br>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                                       |  | C                                                                                                                        |
| Release characteristic                                        |  | C                                                                                                                        |
| Amperage Rating                                               |  | 16 A                                                                                                                     |
| Type                                                          |  | Miniature circuit breaker<br>PLS6                                                                                        |
| Technical Data - Electrical                                   |  |                                                                                                                          |
| Voltage type                                                  |  | AC                                                                                                                       |
| Rated operational voltage (Ue) - max                          |  | 400 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)                     |  | 6 kA                                                                                                                     |
| Rated short-circuit breaking capacity (EN 60898) at 230 V     |  | 6 kA                                                                                                                     |
| Rated short-circuit breaking capacity (EN 60898) at 400 V     |  | 6 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                                          |  | III                                                                                                                      |
| Pollution degree                                              |  | 2                                                                                                                        |
| Technical Data - Mechanical                                   |  |                                                                                                                          |
| Width in number of modular spacings                           |  | 4                                                                                                                        |
| 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) |  | 16 A                                                                                                                     |
| Heat dissipation per pole, current-dependent                  |  | 0 W                                                                                                                      |
| Equipment heat dissipation, current-dependent                 |  | 7.2 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                                                                         |  | Concurrently switching N-neutral<br>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) (ec1@ss13-27-14-19-01 [AAB905019]) |    |         |
| Built-in depth                                                                                                                                                                                                | mm | 70.5    |
| Release characteristic                                                                                                                                                                                        |    | C       |
| Number of poles (total)                                                                                                                                                                                       |    | 4       |
| Number of protected poles                                                                                                                                                                                     |    | 3       |
| Rated current                                                                                                                                                                                                 | A  | 16      |
| Rated voltage                                                                                                                                                                                                 | V  | 400     |
| 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 | 6       |
| Voltage type                                                                                                                                                                                                  |    | AC      |
| Rated short-circuit breaking capacity Icn according to EN 60898 at 400 V                                                                                                                                      | kA | 6       |
| 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 |
| Power loss                                                                                                                                                                                                    | W  | 7.5     |

|                                                 |  |                 |          |
|-------------------------------------------------|--|-----------------|----------|
| 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            |  | °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       |