# Specifications






## Eaton 242497

Eaton Moeller series xPole - PLS6/M MCB. PLSM, 3-pole, tripping characteristic: D, rated current In: 16 A, rated switching capacity IEC/EN 60898-1: 10 kA

| General specifications | |
|---|---|
| **PRODUCT NAME** | Eaton Moeller series xPole - PLS6/M MCB |
| **CATALOG NUMBER** | 242497 |
| **MODEL CODE** | PLSM-D16/3-MW |
| **EAN** | 4015082424978 |
| **PRODUCT LENGTH/DEPTH** | 80 mm |
| **PRODUCT HEIGHT** | 75 mm |
| **PRODUCT WIDTH** | 52.5 mm |
| **PRODUCT WEIGHT** | 0.314 kg |
| **COMPLIANCES** | RoHS compliant |
| **CERTIFICATIONS** | IEC/EN 60898-1 |

## Additional information

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|---|---|
| **CURRENT LIMITING CLASS** | 3 |
| **FEATURES** | Can be fitted with auxiliary accessories |
| **FUNCTIONAL GROUP** | Overcurrent protection |
| **FUNCTIONS** | Overload protection<br>Short Circuit protection |
| **INTERNAL RESISTANCE AT ROOM TEMPERATURE (SINGLE-POLE, 50 HZ)** | 7.9 mΩ |

## Delivery program

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|---|---|
| **AMPERAGE RATING** | 16 A |
| **APPLICATION** | Protection of final circuits in residential, commercial and similar installations |
| **NOMINAL CURRENT** | 16 A |
| **NUMBER OF POLES** | Three-pole |
| **NUMBER OF POLES (PROTECTED)** | 3 |
| **NUMBER OF POLES (TOTAL)** | 3 |
| **RELEASE CHARACTERISTIC** | D |
| **TRIPPING CHARACTERISTIC** | D |
| **TYPE** | • Miniature circuit breaker<br>• PLSM |

## Design verification as per IEC/EN 61439

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|---|---|
| **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. |
| **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. |

## Design verification as per IEC/EN 61439 - technical data

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|---|---|
| **AMBIENT OPERATING TEMPERATURE - MAX** | 75 °C |
| **AMBIENT OPERATING TEMPERATURE - MIN** | -25 °C |
| **RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)** | 16 A |

| | |
|---|---|
| **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. |

## Technical data - electrical

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|---|---|
| **DIRECTION OF INCOMING SUPPLY** | Bidirectional |
| **FREQUENCY RATING - MAX** | 60 Hz |
| **FREQUENCY RATING - MIN** | 50 Hz |
| **LIFESPAN, ELECTRICAL** | >4000 operating cycles |
| **OVERVOLTAGE CATEGORY** | III |
| **POLLUTION DEGREE** | 2 |
| **RATED IMPULSE WITHSTAND VOLTAGE (UIMP)** | 4 kV |
| **RATED INSULATION VOLTAGE (UI)** | 440 V |
| **RATED OPERATIONAL VOLTAGE (UE) - MAX** | 415 V |
| **RATED SERVICE SHORT-CIRCUIT BREAKING CAPACITY (IEC/EN 60898-1) - ICS** | 7.5 kA |
| **RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC/EN 60898-1) - ICN AT 230 V** | 10 kA |
| **RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC/EN 60898-1)- ICN AT 400 V** | 10 kA |
| **RATED SWITCHING CAPACITY (IEC/EN 60898-1)** | 10 kA |
| **SELECTIVITY CLASS** | 3 |
| **VOLTAGE RATING** | • 230/400 V AC<br>• 240/415 V AC |
| **VOLTAGE RATING (IEC/EN 60898-1)** | 415 VAC |
| **VOLTAGE TYPE** | AC |

## Technical data - mechanical

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|---|---|
| **BUILT-IN DEPTH** | 65.5 mm |
| **BUSBAR MATERIAL THICKNESS** | 0.8 mm - 2 mm |
| **CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX** | 25 mm² |
| **CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN** | 1 mm² |
| **CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX** | 25 mm² |
| **CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN** | 1 mm² |
| **CONTACT POSITION INDICATOR COLOR** | Red = ON<br>Green = OFF |
| **DEGREE OF PROTECTION** | IP20 |
| **FRAME** | 45 mm |
| **LIFESPAN, MECHANICAL** | >10000 operating cycles |
| **MOUNTING METHOD** | Two lock-in position on DIN rail (EN/IEC 60715) |
| **MOUNTING POSITION** | As required |
| **MOUNTING WIDTH** | 54 mm |
| **MOUNTING WIDTH PER POLE** | 17.7 mm |
| **TERMINAL PROTECTION** | Touch-safe (EN 50274) |
| **TERMINALS (TOP AND BOTTOM)** | Screw-type with pressure plate |
| **TIGHTENING TORQUE** | 2.4 Nm |
| **WIDTH IN NUMBER OF MODULAR SPACINGS** | 3 |

## Resources

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|---|---|
| **CATALOGUES** | eaton-xpole-protective-devices-catalog-ca019014en-en-us.pdf |
| **DECLARATIONS OF CONFORMITY** | eaton-mcb-declaration-of-conformity-uk251442en.pdf<br><br>eaton-mcb-declaration-of-conformity-eu251398en.pdf |
| **ECAD MODEL** | ETN.PLSM-D16_3-MW.edz |
| **INSTALLATION INSTRUCTIONS** | eaton-mcb-rccb-rcbo-g9-il019140zu.pdf |
| **MCAD MODEL** | pls_3p.stp<br><br>eaton-non-selective-universal-mcb-mcad-3d-models-faz-xxx-3p.stp |
| **PEP ECO-PASSPORT** | eaton-non-selective-universal-mcb-pep-eato-00046-v0102-en.pdf |

| | |
|---|---|
| **PROJECT NAME:** | |
| **PROJECT NUMBER:** | |
| **PREPARED BY:** | |
| **DATE:** | |

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