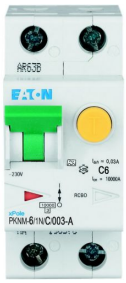
# Specifications


**Photo is representative**



## Eaton 236022

Eaton Moeller series xPole - PKN6/M RCBO - residual-current circuit breaker with overcurrent protection. RCD/MCB, 6A, 30mA, C-LS-Char, 1N pole, FI-Char: A

### General specifications

| | |
|---|---|
| **PRODUCT NAME** | Eaton Moeller series xPole - PKN6/M RCBO - residual-current circuit breaker with overcurrent protection |
| **CATALOG NUMBER** | 236022 |
| **EAN** | 4015082360221 |
| **PRODUCT LENGTH/DEPTH** | 80 mm |
| **PRODUCT HEIGHT** | 75 mm |
| **PRODUCT WIDTH** | 35 mm |
| **PRODUCT WEIGHT** | 0.199 kg |
| **COMPLIANCES** | RoHS conform |
| **CERTIFICATIONS** | CE |
| **MODEL CODE** | PKNM-6/1N/C/003-A-MW |

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## Delivery program

| | |
|---|---|
| **APPLICATION** | Switchgear for residential and commercial applications |
| **PRODUCT RANGE** | PKNM |
| **BASIC FUNCTION** | Combined RCD/MCB devices |
| **NUMBER OF POLES** | Single-pole + N |
| **NUMBER OF POLES (PROTECTED)** | 1 |
| **NUMBER OF POLES (TOTAL)** | 2 |
| **TRIPPING CHARACTERISTIC** | C |
| **RELEASE CHARACTERISTIC** | C |
| **AMPERAGE RATING** | 6 A |
| **RATED CURRENT** | 6 A |
| **FAULT CURRENT RATING** | 0.03 A |
| **SENSITIVITY TYPE** | Type A, pulse-current sensitive |
| **TYPE** | RCBO |

## Technical data - electrical

| | |
|---|---|
| **VOLTAGE TYPE** | AC |
| **VOLTAGE RATING** | 230 V |
| **RATED OPERATIONAL VOLTAGE (UE) - MAX** | 230 V |
| **RATED INSULATION VOLTAGE (UI)** | 440 V |
| **RATED IMPULSE WITHSTAND VOLTAGE (UIMP)** | 4 kV |
| **IMPULSE WITHSTAND CURRENT** | Partly surge-proof, 250 A |
| **FREQUENCY RATING** | 50 Hz |
| **LEAKAGE CURRENT TYPE** | A |
| **RATED SWITCHING CAPACITY** | 10 kA |
| **RATED SWITCHING CAPACITY (IEC/EN 61009)** | 10 kA |
| **RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60947-2)** | 0 kA |
| **RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 61009)** | 10 kA |
| **RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 61009-1)** | 10 kA |
| **RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2)** | 0 kA |
| **SURGE CURRENT CAPACITY** | 0.25 kA |
| **DISCONNECTION CHARACTERISTIC** | Undelayed |
| **TRIPPING** | Non-delayed |
| **OVERVOLTAGE CATEGORY** | III |
| **POLLUTION DEGREE** | 2 |

## Technical data - mechanical

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|---|---|
| **WIDTH IN NUMBER OF MODULAR SPACINGS** | 2 |
| **BUILT-IN DEPTH** | 70 mm |
| **MOUNTING METHOD** | DIN rail |
| **DEGREE OF PROTECTION** | IP20 |
| **CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN** | 1 $mm^2$ |
| **CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX** | 25 $mm^2$ |
| **CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN** | 1 $mm^2$ |
| **CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX** | 25 $mm^2$ |

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

| | |
|---|---|
| **RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)** | 6 A |
| **HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT** | 0 W |
| **EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT** | 1.9 W |
| **STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT** | 0 W |
| **HEAT DISSIPATION CAPACITY** | 0 W |
| **AMBIENT OPERATING TEMPERATURE - MIN** | -25 °C |
| **AMBIENT OPERATING TEMPERATURE - MAX** | 40 °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** | Is the panel builder's responsibility. |

## Additional information

| | |
|---|---|
| **CURRENT LIMITING CLASS** | 3 |
| **FEATURES** | Concurrently switching N-neutral |

| INSULATING MATERIAL | |
|---|---|
| **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. |

## Resources

| | |
|---|---|
| **CATALOGUES** | eaton-xpole-pkn6-rcbo-catalog-ca019043en-en-us.pdf<br>eaton-xpole-pknm-110va-rcbo-catalog-ca019042en-en-us.pdf<br>eaton-xpole-pknm-rcbo-catalog-ca019041en-en-us.pdf |
| **CHARACTERISTIC CURVE** | eaton-xpole-pkn6-m-characteristic-curve-005.jpg |
| **DECLARATIONS OF CONFORMITY** | DA-DC-03_PKN |
| **DRAWINGS** | eaton-xeffect-frbm6m-wiring-diagram.jpg<br>eaton-xpole-pkn6-m-dimensions.jpg<br>eaton-xpole-pkn6-m-3d-drawing.jpg |
| **ECAD MODEL** | ETN.PKNM-6_1N_C_003-A-MW |
| **INSTALLATION INSTRUCTIONS** | eaton-rccb-rcbo-g9-il019140zu.pdf |
| **MCAD MODEL** | eaton-rcd-with-overcurrent-protection-3d-models-fk9051.stp<br>eaton-rcd-with-overcurrent-protection-drawings-fk9051.dwg |

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

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