



## Eaton 102823

Eaton Moeller series xPole - PFIM Type AC, A, U, R RCCB. Residual current circuit breaker (RCCB), 100A, 4p, 30mA, type AC

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|-----------------------------|---|
| <b>PRODUCT NAME</b>         | Eaton Moeller series xPole - PFIM Type AC, A, U, R RCCB |
| <b>CATALOG NUMBER</b>       | 102823  |
| <b>PRODUCT LENGTH/DEPTH</b> | 76 mm   |
| <b>PRODUCT HEIGHT</b>       | 80 mm   |
| <b>PRODUCT WIDTH</b>        | 70 mm   |
| <b>PRODUCT WEIGHT</b>       | 0.392 kg  |
| <b>COMPLIANCES</b>          | RoHS conform  |
| <b>CERTIFICATIONS</b>       | IEC/EN 61008  |

**USED WITH**

PFIM  
Residual current circuit  
breakers  
Type AC  
KLV-TC-4 276241 (Compact  
enclosure)  
Z-FW/LP 248296 (Remote  
control and automatic  
switching device)  
Z-RC/AK-4MU 101062  
(sealing cover set)

**AMPERAGE RATING**

100 A

**VOLTAGE RATING**

230 V AC / 400 V AC

**FEATURES**

Residual current circuit  
breaker  
Additional equipment  
possible

**ACCESSORIES REQUIRED**

Z-HK 248432

**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.

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dimensions.jpg](#)  
  
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drawing.jpg](#)

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| <b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>         | Meets the product standard's requirements.                                       |
| <b>10.2.5 LIFTING</b>   | Does not apply, since the entire switchgear needs to be evaluated.               |
| <b>10.2.6 MECHANICAL IMPACT</b>                                 | Does not apply, since the entire switchgear needs to be evaluated.               |
| <b>10.2.7 INSCRIPTIONS</b>                                      | Meets the product standard's requirements.                                       |
| <b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>                  | Does not apply, since the entire switchgear needs to be evaluated.               |
| <b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>                   | Meets the product standard's requirements.                                       |
| <b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>                   | Does not apply, since the entire switchgear needs to be evaluated.               |
| <b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>   | Does not apply, since the entire switchgear needs to be evaluated.               |
| <b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>        | Is the panel builder's responsibility.   |
| <b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>                 | Is the panel builder's responsibility.   |
| <b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>                 | Is the panel builder's responsibility.   |
| <b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>                         | Is the panel builder's responsibility.   |
| <b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b> | Is the panel builder's responsibility.   |
| <b>FITTED WITH:</b>   | Interlocking device  |
| <b>FRAME</b>  | 45 mm  |
| <b>FREQUENCY RATING</b>   | 50 Hz  |
| <b>POLLUTION DEGREE</b>   | 2  |
| <b>MOUNTING METHOD</b>  | Quick attachment with 2 latch positions for DIN-rail<br>IEC/EN 60715<br>DIN rail |
| <b>CLIMATIC PROOFING</b>  | 25-55 °C / 90-95% relative humidity according to IEC 60068-2                     |
| <b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT</b>            | 18.8 W   |
| <b>RATED IMPULSE WITHSTAND VOLTAGE</b>                          | 4 kV   |

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| <b>(UIMP)</b>  |  |
| <b>RATED SHORT-TIME WITHSTAND CURRENT (ICW)</b>                | 10 kA  |
| <b>ADMISSIBLE BACK-UP FUSE OVERLOAD - MAX</b>                  | 63 A gG/gL                                     |
| <b>BUILT-IN WIDTH (NUMBER OF UNITS)</b>                        | 70 mm (4 SU)                                   |
| <b>BUSBAR MATERIAL THICKNESS</b>                               | 0.8 mm - 2 mm                                  |
| <b>SHORT-CIRCUIT RATING</b>                                    | 100 A (max. admissible back-up fuse)           |
| <b>TERMINAL PROTECTION</b>                                     | Finger and hand touch safe, DGUV VS3, EN 50274 |
| <b>TERMINALS (TOP AND BOTTOM)</b>                              | Open mouthed/lift terminals                    |
| <b>TEST CIRCUIT RANGE</b>                                      | 196 V AC - 264 V AC                            |
| <b>AMBIENT OPERATING TEMPERATURE - MAX</b>                     | 60 °C  |
| <b>AMBIENT OPERATING TEMPERATURE - MIN</b>                     | -25 °C   |
| <b>BUILT-IN DEPTH</b>  | 70.5 mm  |
| <b>CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX</b> | 16 mm <sup>2</sup>                             |
| <b>CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN</b> | 1.5 mm <sup>2</sup>                            |
| <b>CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX</b>  | 35 mm <sup>2</sup>                             |
| <b>CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN</b>  | 1.5 mm <sup>2</sup>                            |
| <b>FAULT CURRENT RATING</b>                                    | 30 mA  |
| <b>HEAT DISSIPATION CAPACITY</b>                               | 0 W  |
| <b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT</b>            | 0 W  |
| <b>PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MAX</b>       | 60 °C  |
| <b>PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MIN</b>       | -35 °C   |
| <b>LIFESPAN, MECHANICAL</b>                                    | 20000 operations                               |

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| <b>DEGREE OF PROTECTION</b>      | IP20<br>IP20, IP40 with suitable enclosure |
| <b>IMPULSE WITHSTAND CURRENT</b> | Partly surge-proof 250 A                   |
| <b>NUMBER OF POLES</b>           | Four-pole                                  |
| <b>LEAKAGE CURRENT TYPE</b>      | AC   |
| <b>LIFESPAN, ELECTRICAL</b>      | 4000 operations                            |

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| <b>TYPE</b> | <ul style="list-style-type: none"> <li>• PFIM</li> <li>• Residual current circuit breakers</li> <li>• Type AC</li> </ul> |
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| <b>SPECIAL FEATURES</b> | <ul style="list-style-type: none"> <li>• Maximum operating temperature is 60 °C: Starting at 40 °C, the max. permissible continuous current decreases by 1.2% for every 1 °C</li> <li>• Tripping signal contact for subsequent installation Z-NHK 248434</li> </ul> |
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| <b>APPLICATION</b> | <ul style="list-style-type: none"> <li>• 3-phase application without N (400V AC phase-phase) not allowed</li> <li>• Residual current circuit breaker for residential and commercial applications</li> <li>• xPole - Switchgear for residential and commercial applications</li> </ul> |
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| <b>SENSITIVITY TYPE</b>  | AC current sensitive |
| <b>RATED FAULT CURRENT - MAX</b>                                     | 0.03 A               |
| <b>RATED FAULT CURRENT - MIN</b>                                     | 0.03 A               |
| <b>RATED INSULATION VOLTAGE (UI)</b>                                 | 440 V                |
| <b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b> | 100 A                |
| <b>RATED OPERATIONAL</b>   | 400 V                |

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| VOLTAGE (UE) - MAX                                    |  |
| RATED RESIDUAL<br>MAKING AND BREAKING<br>CAPACITY     | 1000 A                                   |
| STATIC HEAT<br>DISSIPATION, NON-<br>CURRENT-DEPENDENT | 0 W                                      |
| SURGE CURRENT<br>CAPACITY                             | 0.25 kA                                  |
| WIDTH IN NUMBER OF<br>MODULAR SPACINGS                | 4  |
| VOLTAGE TYPE  | AC                                       |
| TERMINAL CAPACITY<br>(SOLID WIRE)                     | 1.5 mm <sup>2</sup> - 35 mm <sup>2</sup> |
| TRIPPING TIME   | Non-delayed                              |
| RATED SHORT-CIRCUIT<br>STRENGTH                       | 10 kA                                    |
| TERMINAL CAPACITY<br>(STRANDED CABLE)                 | 16 mm <sup>2</sup> (2x)                  |
| RAL-NUMBER  | 7035                                     |
| POWER LOSS  | 18.8 W                                   |
| COLOR   | Gray                                     |

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| PROJECT NAME:   |
| PROJECT NUMBER: |
| PREPARED BY:    |
|                 |