



## Eaton 102927

Eaton Moeller series xPole - PF6/7 RCCB.  
PF7, 4 pole, In: 100 A, Icn: 10 kA, IΔN: 0.3 A,  
Type AC, AC current sensitive, Partly surge-  
proof 250 A, residential and commercial

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|                                 |                                            |
|---------------------------------|--------------------------------------------|
| <b>PRODUCT NAME</b>             | Eaton Moeller series xPole<br>- PF6/7 RCCB |
| <b>CATALOG NUMBER</b>           | 102927                                     |
| <b>PRODUCT<br/>LENGTH/DEPTH</b> | 76 mm                                      |
| <b>PRODUCT HEIGHT</b>           | 80 mm                                      |
| <b>PRODUCT WIDTH</b>            | 70 mm                                      |
| <b>PRODUCT WEIGHT</b>           | 0.32 kg                                    |
| <b>COMPLIANCES</b>              | RoHS conform                               |
| <b>CERTIFICATIONS</b>           | IEC/EN 61008                               |

**USED WITH**

KLV-TC-4 276241 (Compact enclosure) Z-FW/LP 248296 (Remote control and automatic switching device) Z-RC/AK-4TE 101062 (sealing cover set) Residual current circuit breakers PF7 Type AC KLV-TC-4 276241 (Compact enclosure) Z-FW/LP 248296 (Remote control and automatic switching device) Z-RC/AK-4TE 101062 (sealing cover set)

**AMPERAGE RATING**

100 A

**VOLTAGE RATING**

230 V AC / 400 V AC

**FEATURES**

Additional equipment possible  
Residual current circuit breaker

**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**

Meets the product standard's requirements.

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[eaton-xpole-pf6-rccb-catalog-ca019034en-en-us.pdf](#)

[eaton-xpole-pf7-rccb-catalog-ca019032en-en-us.pdf](#)

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[eaton-circuit-breaker-xeffect-frcmm-rccb-dimensions.jpg](#)

[eaton-xpole-pf67-rccb-3d-drawing.jpg](#)

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| <b>TO NORMAL HEAT</b>                                                                   |                                                                                  |
| <b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b> | Meets the product standard's requirements.                                       |
| <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<br>IS/SPE-1TE 101911                                         |
| <b>FRAME</b>                                                                            | 45 mm                                                                            |
| <b>FREQUENCY RATING</b>                                                                 | 50 Hz                                                                            |
| <b>POLLUTION DEGREE</b>                                                                 | 2                                                                                |
| <b>LIFESPAN, MECHANICAL</b>                                                             | 20000 operations                                                                 |
| <b>MOUNTING METHOD</b>                                                                  | Quick attachment with 2 latch positions for DIN-rail<br>IEC/EN 60715<br>DIN rail |

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| <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 (UIMP)</b>                  | 4 kV                                                         |
| <b>RATED SHORT-TIME WITHSTAND CURRENT (ICW)</b>                | 10 kA                                                        |
| <b>ADMISSIBLE BACK-UP FUSE OVERLOAD - MAX</b>                  | 80 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>                                      | 184 V AC - 440 V AC                                          |
| <b>AMBIENT OPERATING TEMPERATURE - MAX</b>                     | 60 °C                                                        |
| <b>AMBIENT OPERATING TEMPERATURE - MIN</b>                     | -25 °C                                                       |
| <b>BUILT-IN DEPTH</b>                                          | 69.5 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>                                    | 300 mA                                                       |
| <b>HEAT DISSIPATION CAPACITY</b>                               | 0 W                                                          |
| <b>HEAT DISSIPATION PER POLE, CURRENT-</b>                     | 0 W                                                          |

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| <b>DEPENDENT</b>                                         |                                            |
| <b>PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MAX</b> | 60 °C                                      |
| <b>PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MIN</b> | -35 °C                                     |
| <b>DEGREE OF PROTECTION</b>                              | IP20, IP40 with suitable enclosure<br>IP20 |
| <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                            |

|             |                                                                                                                         |
|-------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>TYPE</b> | <ul style="list-style-type: none"> <li>• PF7</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>• 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>     | 0.3 A                |
| <b>RATED FAULT CURRENT - MIN</b>     | 0.3 A                |
| <b>RATED INSULATION VOLTAGE (UI)</b> | 440 V                |

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|---------------------------------------------------------------------|------------------|
| RATED OPERATIONAL<br>CURRENT FOR SPECIFIED<br>HEAT DISSIPATION (IN) | 100 A            |
| RATED OPERATIONAL<br>VOLTAGE (UE) - MAX                             | 400 V            |
| RATED RESIDUAL<br>MAKING AND BREAKING<br>CAPACITY                   | 500 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 mm² - 35 mm² |
| TRIPPING TIME                                                       | Non-delayed      |
| RATED SHORT-CIRCUIT<br>STRENGTH                                     | 10 kA            |
| TERMINAL CAPACITY<br>(STRANDED CABLE)                               | 16 mm² (2x)      |
| RAL-NUMBER                                                          | 7035             |
| COLOR                                                               | Gray             |

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