

Eaton 229676

Eaton Moeller® series PKZM0 Motor-protective circuit-breaker, 3p, Ir=2.5-4A, spring clamp connection PKZM0-4-C

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| PRODUCT NAME | Eaton Moeller® series PKZM0 Motor-protective circuit-breaker |
| CATALOG NUMBER | 229676 |
| PRODUCT LENGTH/DEPTH | 76 mm |
| PRODUCT HEIGHT | 93 mm |
| PRODUCT WIDTH | 45 mm |
| PRODUCT WEIGHT | 0.287 kg |
| COMPLIANCES | CE Marked |
| CERTIFICATIONS | IEC 60947-4-1 CSA Std. C22.2 No. 14 UL 508 VDE CSA CSA-C22.2 No. 60947-4-1-14 VDE 0660 CE UL Category Control No.: NLRV IEC/EN 60947-4-1 UL File No.: E36332 IEC/EN 60947 CSA Class No.: 3211-05 UL 60947-4-1 CSA File No.: 165628 UL |
| CATALOG NOTES | This item can only be ordered until December 31, 2023 with a maximum delivery date of May 31, 2024. |

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| FEATURES | Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102) |
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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. |

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| CHARACTERISTIC CURVE | eaton-manual-motor-starters-characteristic-characteristic-curve-011.eps |
| | eaton-manual-motor-starters-characteristic-characteristic-curve-008.eps |
| | IL03402034Z |
| | IL03407011Z.pdf |
| | eaton-manual-motor-starters-transformer-pkzm0-wiring-diagram.eps |
| | eaton-manual-motor-starters-pkzm0-3d-drawing-008.eps |
| | eaton-manual-motor-starters-pkzm0-3d-drawing-002.eps |

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| 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. |
| OPERATING FREQUENCY | 40 Operations/h |
| POLLUTION DEGREE | 3 |
| CLIMATIC PROOFING | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |
| ACTUATOR TYPE | Turn button |
| TRIPPING CHARACTERISTIC | Overload trigger: tripping class 10 A |
| ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MAX | 62 A |
| ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN | 62 A |
| AMBIENT OPERATING TEMPERATURE - MAX | 55 °C |
| AMBIENT OPERATING TEMPERATURE - MIN | -25 °C |
| AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX | 40 °C |
| AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN | -25 °C |

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| AMBIENT STORAGE TEMPERATURE - MAX | 80 °C |
| AMBIENT STORAGE TEMPERATURE - MIN | -40 °C |
| ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE | 0.125 HP |
| ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE | 0.75 HP |
| ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE | 0.33 HP |
| ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE | 0.75 HP |
| ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE | 2 HP |
| ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE | 3 HP |
| EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID | 5.33 W |
| HEAT DISSIPATION CAPACITY PDISS | 0 W |
| HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID | 1.78 W |
| INTERNAL RESISTANCE | 110 mΩ |
| RATED IMPULSE WITHSTAND VOLTAGE (UIMP) | 6000 V AC |
| ALTITUDE | Max. 2000 m |
| DEVICE CONSTRUCTION | Built-in device fixed built-in technique |
| EXPLOSION SAFETY CATEGORY FOR DUST | ATEX dust-ex-protection, PTB 10, ATEX 3013, Ex II(2) GD |
| CONNECTION | Spring-loaded terminals |
| ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT | Spring clamp connection |
| MOUNTING POSITION | Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height. |
| LIFESPAN, MECHANICAL | 100,000 Operations (Main conducting paths) |

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| OVERVOLTAGE CATEGORY | III |
| DEGREE OF PROTECTION | IP20 Terminals: IP00 |
| NUMBER OF POLES | Three-pole |
| LIFESPAN, ELECTRICAL | 100,000 operations (at 400V, AC-3) |
| SHOCK RESISTANCE | 25 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms |
| FUNCTIONS | Phase failure sensitive Motor protection |
| TERMINAL CAPACITY (SOLID/STRANDED AWG) | 18 - 14 |
| SWITCHING CAPACITY | 4 A, AC-3 up to 690 V 4 A (3 contacts in series), DC-5 up to 250V |
| OVERLOAD RELEASE CURRENT SETTING - MAX | 4 A |
| OVERLOAD RELEASE CURRENT SETTING - MIN | 2.5 A |
| RATED FREQUENCY - MAX | 60 Hz |
| RATED FREQUENCY - MIN | 50 Hz |
| RATED OPERATIONAL VOLTAGE (UE) - MAX | 690 V |
| RATED OPERATIONAL VOLTAGE (UE) - MIN | 690 V |
| RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) | 4 A |
| RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ | 0.75 kW |
| RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ | 1.5 kW |
| RATED UNINTERRUPTED CURRENT (IU) | 4 A |
| STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS | 0 W |
| STRIPPING LENGTH (MAIN CABLE) | 10 mm |
| PRODUCT CATEGORY | Motor protective circuit breaker |

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| PROTECTION | Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) |
| RATED OPERATIONAL POWER AT AC-3, 440 V, 50 HZ | 1.5 kW |
| RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ | 2.2 kW |
| RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ | 3 kW |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC | 150 kA |
| SUITABLE FOR | Branch circuit: Manual type E if used with terminal, or suitable for group installations, (UL/CSA) Also motors with efficiency class IE3 |
| SHORT-CIRCUIT RELEASE | 62 A, I _{rm} , Setting range max. ± 20% tolerance, Trip blocks Basic device fixed 15.5 x I _u , Trip Blocks |
| TERMINAL CAPACITY (SOLID) | 2 x (0.75 - 2.5) mm ² , Spring-loaded terminals 1 x (0.75 - 2.5) mm ² , Spring-loaded terminals |
| RATED OPERATIONAL CURRENT (IE) | 4 A |
| TEMPERATURE COMPENSATION | -25 - 55 °C, Operating range -5 - 40 °C to IEC/EN 60947, VDE 0660 ≤ 0.25 %/K, residual error for T > 40° |
| SHORT-CIRCUIT CURRENT | 60 kA DC, up to 250 V DC, Main conducting paths |
| SHORT-CIRCUIT CURRENT RATING (GROUP PROTECTION) | 600 A, 600 V High Fault, max. CB, SCCR (UL/CSA) 50 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) 50 kA, 600 V High Fault, CB, SCCR (UL/CSA) 600 A, 600 V High Fault, max. Fuse, SCCR (UL/CSA) |

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| SHORT-CIRCUIT CURRENT RATING (TYPE E) | 65 kA, 480 Y/277 V, SCCR (UL/CSA) |
| | Accessories required |
| | BK25/3-PKZ0-E |
| | 65 kA, 240 V, SCCR (UL/CSA) |
| | 50 kA, 600 Y/347 V, SCCR (UL/CSA) |
| TIGHTENING TORQUE | 1 Nm, Screw terminals, Control circuit cables |
| SWITCH OFF TECHNIQUE | Thermomagnetic |
| TERMINAL CAPACITY (FLEXIBLE) | 2 x (0.75 - 2.5) mm ² , ferrule to DIN 46228, Spring-loaded terminals |
| | 1 x (0.75 - 2.5) mm ² , ferrule to DIN 46228, Spring-loaded terminals |
| POWER LOSS | 5.33 W |

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