

Motor-protective circuit-breaker, 3p+1N/0+1N/C, Ir=0.63-1A, screw connection
Part no. PKZM0-1/NH11
039429

| General specifications | | |
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| Product name | | Eaton Moeller® series PKZM0 Motor-protective circuit-breaker |
| Part no. | | PKZM0-1/NH11 |
| EAN | | 4015080394297 |
| Product Length/Depth | | 76 millimetre |
| Product height | | 93 millimetre |
| Product width | | 54 millimetre |
| Product weight | | 0.288 kilogram |
| Certifications | | VDE 0660 UL IEC/EN 60947 CE CSA CSA-C22.2 No. 60947-4-1-14 IEC/EN 60947-4-1 UL 60947-4-1 CSA Class No.: 3211-05 UL File No.: E36332 CSA File No.: 165628 UL Category Control No.: NLRV UL CSA |
| Product Tradename | | PKZM0 |
| Product Type | | Motor-protective circuit-breaker |
| Product Sub Type | | None |
| Catalog Notes | | Calculate assigned motor power according to rated current (NEC Table 430-150) IE3-ready devices are identified by the logo on their packaging. |
| Features & Functions | | |
| Actuator type | | Turn button |
| Features | | Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102) |
| Fitted with: | | Auxiliary switch |
| Functions | | Motor protection Phase failure sensitive |
| Number of poles | | Three-pole |
| General information | | |
| Connection | | Screw terminals |
| Degree of protection | | IP20 Terminals: IP00 |
| Explosion safety category for dust | | ATEX dust-ex-protection, PTB 10, ATEX 3013, Ex II(2) GD |
| Lifespan, electrical | | 100,000 operations |
| Lifespan, mechanical | | 100,000 Operations |
| Mounting position | | Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height. |
| Operating frequency | | 40 Operations/h |
| Overvoltage category | | III |
| Pollution degree | | 3 |
| Product category | | Motor protective circuit breaker |
| Protection | | Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) |
| Rated impulse withstand voltage (Uimp) | | 6000 V AC |
| Shock resistance | | 25 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms |
| Suitable for | | Also motors with efficiency class IE3 Branch circuit: Manual type E if used with terminal, or suitable for group installations, (UL/CSA) |
| Temperature compensation | | -25 - 55 °C, Operating range ≤ 0.25 %/K, residual error for T > 40° -5 - 40 °C to IEC/EN 60947, VDE 0660 |

| Climatic environmental conditions | | |
|---|--|---|
| Altitude | | Max. 2000 m |
| Ambient operating temperature - min | | -25 °C |
| Ambient operating temperature - max | | 55 °C |
| Ambient operating temperature (enclosed) - min | | 25 °C |
| Ambient operating temperature (enclosed) - max | | 40 °C |
| Ambient storage temperature - min | | 40 °C |
| Ambient storage temperature - max | | 80 °C |
| Climatic proofing | | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |
| Terminal capacities | | |
| Terminal capacity (flexible with ferrule) | | 1 x (0.75 - 1.5) mm ² 2 x (0.75 - 1.5) mm ² |
| Terminal capacity (solid) | | 2 x (0.75 - 2.5) mm ² , Control circuit cables 1 x (0.75 - 2.5) mm ² , Control circuit cables |
| Terminal capacity (solid/stranded AWG) | | 18 - 10 18 - 14 |
| Stripping length (main cable) | | 10 mm |
| Tightening torque | | 1 Nm, Screw terminals, Control circuit cables 1.7 Nm, Screw terminals, Main cable |
| Electrical rating | | |
| Rated frequency - min | | 50 Hz |
| Rated frequency - max | | 60 Hz |
| Rated operational current (Ie) | | 1 A |
| Rated operational power at AC-3, 220/230 V, 50 Hz | | 0.12 kW |
| Rated operational power at AC-3, 380/400 V, 50 Hz | | 0.25 kW |
| Rated operational power at AC-3, 440 V, 50 Hz | | 0.25 kW |
| Rated operational power at AC-3, 500 V, 50 Hz | | 0.37 kW |
| Rated operational power at AC-3, 690 V, 50 Hz | | 0.55 kW |
| Rated operational voltage (Ue) - min | | 690 V |
| Rated operational voltage (Ue) - max | | 690 V |
| Rated uninterrupted current (Iu) | | 1 A |
| Short-circuit rating | | |
| Rated short-circuit breaking capacity Icu at 400 V AC | | 150 kA |
| Rated short-circuit breaking capacity Ics at 400 V AC | | 150 kA |
| Rated short-circuit breaking capacity Icu at 440 V AC | | 150 kA |
| Rated short-circuit breaking capacity Ics at 440 V AC | | 150 kA |
| Rated short-circuit breaking capacity Icu at 500 V AC | | 150 kA |
| Rated short-circuit breaking capacity Ics at 500 V AC | | 150 kA |
| Rated short-circuit breaking capacity Icu at 690 V AC | | 150 kA |
| Rated short-circuit breaking capacity Ics at 690 V AC | | 150 kA |
| Short-circuit current | | 60 kA DC, up to 250 V DC, Main conducting paths |
| Short-circuit current rating (type E) | | 50 kA, 600 Y/347 V, SCCR (UL/CSA) 65 kA, 240 V, SCCR (UL/CSA) 65 kA, 480 Y/277 V, SCCR (UL/CSA) Accessories required BK25/3-PKZ0-E |
| Short-circuit release | | ± 20% tolerance, Trip blocks Basic device fixed 15.5 x Iu, Trip Blocks 15.5 A, Irm, Setting range max. |
| Switching capacity | | |
| Switching capacity | | 1 A, General use UL/CSA 5 A, 600 V AC, A600 Pilot Duty, General use UL/CSA 1 A (3 contacts in series), DC-5 up to 250V 1 A, 250 V DC, Q300 Pilot Duty, General use UL/CSA 1 A, AC-3 up to 690 V |
| Trip blocks | | |
| Overload release current setting - min | | 0.63 A |
| Overload release current setting - max | | 1 A |
| Tripping characteristic | | Overload trigger: tripping class 10 A |
| Design verification | | |

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| Equipment heat dissipation, current-dependent Pvid | | 5.33 W |
| Heat dissipation capacity Pdis | | 0 W |
| Heat dissipation per pole, current-dependent Pvid | | 1.78 W |
| Rated operational current for specified heat dissipation (In) | | 1 A |
| Static heat dissipation, non-current-dependent Pvs | | 0 W |
| 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 insulating material | | Is the panel builder's responsibility. |
| 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. |

Technical data ETIM 9.0

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| Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (EC000074) | | |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss13-27-37-04-01 [AGZ529021]) | | |
| Overload release current setting | A | 0.63 - 1 |
| Adjustment range undelayed short-circuit release | A | 15.5 - 15.5 |
| With thermal overload protection | | No |
| Phase failure sensitive | | Yes |
| Switch off technique | | Thermomagnetic |
| Rated operating voltage | V | 690 - 690 |
| Rated permanent current Iu | A | 1 |
| Rated operation power at AC-3, 230 V | kW | 0.12 |
| Rated operation power at AC-3, 400 V | kW | 0.25 |
| Power loss | W | 5.33 |
| Type of electrical connection of main circuit | | Screw connection |
| Type of control element | | Turn button |
| Device construction | | Built-in device fixed built-in technique |
| With integrated auxiliary switch | | Yes |
| With integrated under voltage release | | No |
| Number of poles | | 3 |
| Rated short-circuit breaking capacity Icu at 400 V, AC | kA | 150 |
| Degree of protection (IP) | | IP20 |
| Height | mm | 93 |
| Width | mm | 54 |
| Depth | mm | 76 |

