Eaton 156397

Eaton Moeller® series PKZM0 Motorprotective circuit-breaker, 3p, Ir=8-12A, thumb grip lockable

| PRODUCT NAME | Eaton Moeller® series PKZM0 Motor-protective circuit-breaker |
|-------------------------|---|
| CATALOG NUMBER | 156397 |
| PRODUCT LENGTH/DEPTH | 76 mm |
| PRODUCT HEIGHT | 94 mm |
| PRODUCT WIDTH | 45 mm |
| PRODUCT WEIGHT | 0.296 kg |
| CERTIFICATIONS | CE UL Category Control No.: NLRV UL CSA-C22.2 No. 60947-4-1- 14 CSA File No.: 165628 CSA Class No.: 3211-05 UL 60947-4-1 CSA IEC/EN 60947 UL File No.: E36332 IEC/EN 60947-4-1 VDE 0660 |



| 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. |

| | eaton-motorstarters- |
|----------------------|------------------------------|
| | tripping-characteristic- |
| | pkzm0-characteristic- |
| | <u>curve.eps</u> |
| CHARACTERISTIC CURVE | eaten manual meter |
| | eaton-manual-motor- |
| | starters-characteristic- |
| | <u>characteristic-curve-</u> |
| | <u>008.eps</u> |
| | <u>IL03402034Z</u> |
| | <u>IL03407010Z.pdf</u> |
| | eaton-manual-motor- |
| | starters-transformer- |
| | pkzm0-wiring-diagram.eps |
| | eaton-manual-motor- |
| | starters-pkzm0-3d- |
| | drawing.eps |
| | |
| | eaton-manual-motor- |
| | starters-pkzm0-3d- |
| | drawing-008.eps |

| 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 | ls the panel builder's responsibility. |
| 10.9.3 IMPULSE WITHSTAND VOLTAGE | ls the panel builder's responsibility. |
| 10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL | ls the panel builder's responsibility. |
| FITTED WITH: | Padlock locking |
| OPERATING FREQUENCY | 40 Operations/h |
| POLLUTION DEGREE | 3 |
| I OLLO HON DEGICE | J |
| CLIMATIC PROOFING | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 |
| | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to |
| CLIMATIC PROOFING | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 |
| CLIMATIC PROOFING ACTUATOR TYPE TRIPPING | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Turn button Overload trigger: tripping |
| CLIMATIC PROOFING ACTUATOR TYPE TRIPPING CHARACTERISTIC ADJUSTMENT RANGE UNDELAYED SHORT- | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Turn button Overload trigger: tripping class 10 A |
| CLIMATIC PROOFING ACTUATOR TYPE TRIPPING CHARACTERISTIC ADJUSTMENT RANGE UNDELAYED SHORT- CIRCUIT RELEASE - MAX ADJUSTMENT RANGE UNDELAYED SHORT- | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Turn button Overload trigger: tripping class 10 A |
| CLIMATIC PROOFING ACTUATOR TYPE TRIPPING CHARACTERISTIC ADJUSTMENT RANGE UNDELAYED SHORT- CIRCUIT RELEASE - MAX ADJUSTMENT RANGE UNDELAYED SHORT- CIRCUIT RELEASE - MIN AMBIENT OPERATING | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Turn button Overload trigger: tripping class 10 A 186 A |
| CLIMATIC PROOFING ACTUATOR TYPE TRIPPING CHARACTERISTIC ADJUSTMENT RANGE UNDELAYED SHORT- CIRCUIT RELEASE - MAX ADJUSTMENT RANGE UNDELAYED SHORT- CIRCUIT RELEASE - MIN AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Turn button Overload trigger: tripping class 10 A 186 A 186 A |
| CLIMATIC PROOFING ACTUATOR TYPE TRIPPING CHARACTERISTIC ADJUSTMENT RANGE UNDELAYED SHORT- CIRCUIT RELEASE - MAX ADJUSTMENT RANGE UNDELAYED SHORT- CIRCUIT RELEASE - MIN AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT OPERATING TEMPERATURE - MIN | Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Turn button Overload trigger: tripping class 10 A 186 A 55 °C -25 °C |

| TEMPERATURE (ENCLOSED) - MIN | |
|--|--|
| AMBIENT STORAGE TEMPERATURE - MAX | 80 °C |
| AMBIENT STORAGE TEMPERATURE - MIN | -40 °C |
| ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE | 0.5 HP |
| ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE | 3 HP |
| ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE | 2 HP |
| ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE | 3 HP |
| ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE | 7.5 HP |
| ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE | 10 HP |
| EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID | 6.64 W |
| HEAT DISSIPATION CAPACITY PDISS | 0 W |
| HEAT DISSIPATION PER POLE, CURRENT- DEPENDENT PVID | 2.21 W |
| INTERNAL RESISTANCE | 15 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 | PTB 10, ATEX 3013 Ex II (2) G [Ex eb Gb] [Ex db Gb] [Ex pxb Gb] Ex II (2) D [Ex tb Db] [Ex pxb Db] |
| CONNECTION | Screw terminals |
| ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT | Screw 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) |
| OVERVOLTAGE CATEGORY | III |
| DEGREE OF PROTECTION | Terminals: IP00 IP20 |
| 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 - 10 |
| SWITCHING CAPACITY | 12 A, AC-3 up to 690 V 12 A (3 contacts in series), DC-5 up to 250V |
| OVERLOAD RELEASE CURRENT SETTING - MAX | 12 A |
| OVERLOAD RELEASE CURRENT SETTING - MIN | 8 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) | 12 A |
| RATED OPERATIONAL POWER AT AC-3E, 220/230 V, 50 HZ | 3 kW |
| RATED OPERATIONAL POWER AT AC-3E, 380/400 V, 50 HZ | 5.5 kW |
| RATED UNINTERRUPTED CURRENT (IU) | 12 A |
| STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT PVS | 0 W |

| STRIPPING LENGTH (MAIN CABLE) | 10 mm |
|---|--|
| PRODUCT CATEGORY | Motor protective circuit breaker |
| PROTECTION | Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) |
| RATED OPERATIONAL POWER AT AC-3E, 440 V, 50 HZ | 5.5 kW |
| RATED OPERATIONAL POWER AT AC-3E, 500 V, 50 HZ | 5.5 kW |
| RATED OPERATIONAL POWER AT AC-3E, 690 V, 50 HZ | 11 kW |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC | 50 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 400 V AC | 38 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 440 V AC | 15 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 440 V AC | 12 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 500 V AC | 15 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 500 V AC | 4 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 690 V AC | 3 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 690 V AC | 2 kA |
| SUITABLE FOR | Also motors with efficiency class IE3 Branch circuit: Manual type E if used with terminal, or suitable for group installations, (UL/CSA) |
| SHORT-CIRCUIT RELEASE | Basic device fixed 15.5 x lu |

| | ± 20% tolerance 186 A, Irm |
|---|--|
| TERMINAL CAPACITY (SOLID) | 1 x (1 - 6) mm ² 2 x (1 - 6) mm ² |
| RATED OPERATIONAL CURRENT (IE) | 12 A |
| TEMPERATURE COMPENSATION | -5 - 40 °C to IEC/EN 60947, VDE 0660 -25 - 55 °C, Operating range ≤ 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) | 18 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) with 600 A, 600 V High Fault, CB, SCCR (UL/CSA) 18 kA, 600 V High Fault, CB, SCCR (UL/CSA) with 600 A, 600 V High Fault, Fuse, SCCR (UL/CSA) 65 kA, 480 V High Fault, Fuse, SCCR (UL/CSA) with 600 A, 480 V High Fault, Fuse, SCCR (UL/CSA) 65 kA, 480 V High Fault, CB, SCCR (UL/CSA) with 600 A, 480 V High Fault, CB, SCCR (UL/CSA) with |
| SHORT-CIRCUIT CURRENT RATING (TYPE E) | 65 kA, 480 Y/277 V, SCCR (UL/CSA) 18 kA, 600 Y/347 V, SCCR (UL/CSA) Accessories required BK25/3-PKZ0-E 65 kA, 240 V, SCCR (UL/CSA) |
| TIGHTENING TORQUE | 1 Nm, Screw terminals, Control circuit cables 1.7 Nm, Screw terminals, Main cable |
| SWITCH OFF TECHNIQUE | Thermomagnetic |
| TERMINAL CAPACITY (FLEXIBLE WITH FERRULE) | 2 x (1 - 6) mm ² , ferrule to DIN 46228 1 x (1 - 6) mm ² , ferrule to DIN 46228 |
| POWER LOSS | 6.64 W |
| | |

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



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