

Eaton 113221

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 200A, plug-in module, busbar terminal for CU C, frame 2, A200-SVE

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| PRODUCT NAME | Eaton Moeller series NZM molded case circuit breaker thermo-magnetic |
| CATALOG NUMBER | 113221 |
| PRODUCT LENGTH/DEPTH | 180 mm |
| PRODUCT HEIGHT | 245 mm |
| PRODUCT WIDTH | 105 mm |
| PRODUCT WEIGHT | 2.784 kg |
| COMPLIANCES | RoHS conform |
| CERTIFICATIONS | IEC/EN 60947 IEC |



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| AMPERAGE RATING | 200 A |
| VOLTAGE RATING | 690 V - 690 V |
| CIRCUIT BREAKER FRAME TYPE | NZM2 |
| FEATURES | Protection unit Motor drive optional |
| ACCESSORIES REQUIRED | NZM2-XSVS |
| 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. |

| CHARACTERISTIC CURVE | eaton-circuit-breaker-nzm- mccb-characteristic-curve- 050.eps |
|----------------------|--|
| | eaton-circuit-breaker- characteristic-power- defense-mccb- characteristic-curve- 031.eps |
| | eaton-circuit-breaker- characteristic-power- defense-mccb- characteristic-curve- 035.eps |
| 00000 | eaton-circuit-breaker-plug- in-adapter-nzm2- il01219023z.pdf |
| 00 | eaton-circuit-breaker- adapter-nzm-mccb- dimensions-002.eps eaton-circuit-breaker-nzm- |
| | mccb-dimensions-019.eps |

| 10.2.7 INSCRIPTIONS | Meets the product standard's requirements. |
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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 | ls the panel builder's responsibility. |
| 10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS | ls 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. |
| POLLUTION DEGREE | 3 |
| | DIN rail (top hat rail) mounting optional Built-in device plug-in |
| MOUNTING METHOD | technique Plug-in unit |
| CLIMATIC PROOFING | technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 |
| | technique Plug-in unit Damp heat, constant, to |
| | technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC |
| CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- | technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 48 W A (IEC/EN 60947-2) |
| CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT | technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 48 W |
| CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY | technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 48 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and |
| CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY ISOLATION AMBIENT OPERATING | technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 48 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) |
| CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY ISOLATION AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING | technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 48 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) 70 °C |
| CLIMATIC PROOFING EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT UTILIZATION CATEGORY ISOLATION AMBIENT OPERATING TEMPERATURE - MAX AMBIENT OPERATING TEMPERATURE - MIN AMBIENT STORAGE | technique Plug-in unit Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 48 W A (IEC/EN 60947-2) 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) 70 °C -25 °C |

| TEMPERATURE - MIN | |
|---|--|
| NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS) | 0 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS) | 0 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS) | 0 |
| PROTECTION AGAINST DIRECT CONTACT | Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110 |
| DEGREE OF PROTECTION | IP20 IP20 (basic degree of protection, in the operating controls area) |
| DIRECTION OF INCOMING SUPPLY | As required |
| ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT | Screw connection |
| LIFESPAN, MECHANICAL | 20000 operations |
| OVERVOLTAGE CATEGORY | Ш |
| DEGREE OF PROTECTION (IP), FRONT SIDE | IP40 (with insulating surround) IP66 (with door coupling rotary handle) |
| DEGREE OF PROTECTION (TERMINATIONS) | IP00 (terminations, phase isolator and strip terminal) |
| | IP10 (tunnel terminal) |
| NUMBER OF POLES | Three-pole |
| TERMINAL CAPACITY (COPPER STRIP) | Max. 10 segments of 24 mm x 0.8 mm at rear-side connection (punched) Min. 2 segements of 16 mm x 0.8 mm at rear-side connection (punched) Max. 8 segments of 24 mm x 1 mm (2x) at box terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal Min. 2 segments of 9 mm x 0.8 mm at box terminal |
| LIFESPAN, ELECTRICAL | 10000 operations at 400 V AC-1 7500 operations at 415 V AC-1 5000 operations at 690 V |

| | System and cable |
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| FUNCTIONS | protection |
| ТҮРЕ | Circuit breaker |
| SPECIAL FEATURES | Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit breaker (Rated short-circuit breaking capacity lcn) Rated current = rated uninterrupted current: 200 A |
| APPLICATION | Use in unearthed supply systems at 690 V |
| SHOCK RESISTANCE | 20 g (half-sinusoidal shock 20 ms) |
| POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT | Front side |
| RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) | 200 A |
| POWER LOSS | 48 W |
| RELEASE SYSTEM | Thermomagnetic release |
| SHORT-CIRCUIT TOTAL BREAKTIME | < 10 ms |
| RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S) | 85 kA |
| SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX | 2000 A |
| SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN | 1200 A |
| TERMINAL CAPACITY (CONTROL CABLE) | 0.75 mm ² - 1.5 mm ² (2x) 0.75 mm ² - 2.5 mm ² (1x) |
| TERMINAL CAPACITY (COPPER BUSBAR) | Min. 16 mm x 5 mm direct at switch rear-side connection M8 at rear-side screw connection Max. 24 mm x 8 mm direct at switch rear-side connection |

| TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE) | 6 mm² - 16 mm² (2x) at box terminal 6 mm² - 16 mm² (2x) direct at switch rear-side connection 16 mm² (1x) at tunnel terminal 10 mm² - 16 mm² (1x) direct at switch rear-side connection 10 mm² - 16 mm² (1x) at box terminal |
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| TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE) | 16 mm² (1x) at tunnel terminal |
| TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE) | 25 mm² - 70 mm² (2x) direct at switch rear-side connection 25 mm² - 185 mm² (1x) direct at switch rear-side connection 25 mm² - 70 mm² (2x) at box terminal 25 mm² - 185 mm² (1x) at 1-hole tunnel terminal 25 mm² - 185 mm² (1x) at box terminal |
| TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE) | 25 mm² - 185 mm² (1x) at tunnel terminal |
| HANDLE TYPE | Rocker lever |
| SHORT DELAY CURRENT SETTING (ISD) - MAX | 0 A |
| SHORT DELAY CURRENT SETTING (ISD) - MIN | 0 A |
| INSTANTANEOUS CURRENT SETTING (II) - MAX | 2000 A |
| INSTANTANEOUS CURRENT SETTING (II) - MIN | 1200 A |
| NUMBER OF OPERATIONS PER HOUR - MAX | 120 |
| OVERLOAD CURRENT SETTING (IR) - MAX | 200 A |
| OVERLOAD CURRENT SETTING (IR) - MIN | 160 A |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ | 55 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS | 36 kA |

| (IEC/EN 60947) AT 400/415 V, 50/60 HZ | |
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| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ | 22.5 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 525 V, 50/60 HZ | 6 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 690 V, 50/60 HZ | 4 kA |
| RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ | 76 kA |
| RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ | 63 kA |
| RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 525 V, 50/60 HZ | 24 kA |
| RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 690 V, 50/60 HZ | 14 kA |
| STANDARD TERMINALS | Screw terminal |
| OPTIONAL TERMINALS | Box terminal. Connection on rear. Tunnel terminal |
| RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ | 121 kA |
| RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS | 6000 V |
| RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS | 8000 V |
| RATED INSULATION VOLTAGE (UI) | 690 V AC |

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



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