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Eaton 269144

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 25A, B2-AF25-NA

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| PRODUCT NAME | Eaton Moeller series NZM molded case circuit breaker thermo-magnetic |
| CATALOG NUMBER | 269144 |
| PRODUCT LENGTH/DEPTH | 149 mm |
| PRODUCT HEIGHT | 195 mm |
| PRODUCT WIDTH | 105 mm |
| PRODUCT WEIGHT | 2.409 kg |
| COMPLIANCES | RoHS conform |
| CERTIFICATIONS | CSA (File No. 22086) IEC/EN 60947 IEC IEC 60947-2 UL listed Specially designed for North America CSA-C22.2 No. 5-09 UL/CSA CSA (Class No. 1432-01) UL (Category Control Number DIVQ) CSA certified UL (File No. E31593) UL 489 CE marking |

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| AMPERAGE RATING | 25 A |
| VOLTAGE RATING | 440 V - 440 V |
| CIRCUIT BREAKER FRAME TYPE | NZM2 |
| FEATURES | Protection unit Motor drive optional |
| 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. |

CHARACTERISTIC CURVE

[eaton-circuit-breaker-nzm-mccb-characteristic-curve-050.eps](#)

[eaton-circuit-breaker-current-nzm-mccb-characteristic-curve-003.eps](#)

[eaton-circuit-breaker-nzm-mccb-characteristic-curve-038.eps](#)

[eaton-circuit-breaker-nzm-mccb-dimensions-019.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. |
| POLLUTION DEGREE | 3 |
| LIFESPAN, MECHANICAL | 20000 operations |
| UTILIZATION CATEGORY | A (IEC/EN 60947-2) |
| MOUNTING METHOD | Built-in device fixed built-in technique Fixed DIN rail (top hat rail) mounting optional |
| CLIMATIC PROOFING | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |
| EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT | 5.89 W |
| ISOLATION | 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) |
| AMBIENT OPERATING TEMPERATURE - MAX | 70 °C |
| AMBIENT OPERATING TEMPERATURE - MIN | -25 °C |
| AMBIENT STORAGE TEMPERATURE - MAX | 70 °C |
| AMBIENT STORAGE TEMPERATURE - MIN | 40 °C |

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| LOW-VOLTAGE HBC FUSE - MAX | 355 A gG/gL |
| 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 |
| OVERVOLTAGE CATEGORY | III |
| RATED OPERATIONAL CURRENT | 300 A (380/400 V AC-1, making and breaking capacity) 300 A (415 V AC-1, making and breaking capacity) |
| DEGREE OF PROTECTION (IP), FRONT SIDE | IP66 (with door coupling rotary handle) IP40 (with insulating surround) |
| DEGREE OF PROTECTION (TERMINATIONS) | IP00 (terminations, phase isolator and strip terminal) IP10 (tunnel terminal) |
| NUMBER OF POLES | Three-pole |
| TERMINAL CAPACITY (COPPER STRIP) | Min. 2 segments of 9 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at box terminal Max. 10 segments of 16 mm x 0.8 mm at rear-side connection (punched) Min. 2 segments of 16 mm x 0.8 mm at rear-side connection (punched) Min. 2 segments of 16 mm x 0.8 mm at rear-side connection (punched) |
| LIFESPAN, ELECTRICAL | 7500 operations at 400 V |

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| | AC-1 6500 operations at 415 V AC-3 |
| FUNCTIONS | System and cable protection Current limiting circuit breaker |
| TYPE | Circuit breaker |
| SPECIAL FEATURES | <ul style="list-style-type: none"> • 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 I_{cn}) • Rated current = rated uninterrupted current: 25 A • Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate. • Fixed overload releases I_r |
| APPLICATION | <ul style="list-style-type: none"> • Branch circuits, feeder circuits • Use in unearthed supply systems at 440 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) | 25 A |
| POWER LOSS | 5.9 W |
| RELEASE SYSTEM | Thermomagnetic release |
| SHORT-CIRCUIT TOTAL BREAKTIME | < 10 ms |

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| SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX | 350 A |
| SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN | 350 A |
| TERMINAL CAPACITY (CONTROL CABLE) | 16 mm ² - 18 mm ² (2x) 14 mm ² - 18 mm ² (1x) |
| TERMINAL CAPACITY (COPPER BUSBAR) | M8 at rear-side screw connection Max. 20 mm x 5 mm direct at switch rear-side connection Min. 16 mm x 5 mm direct at switch rear-side connection |
| TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE) | 16 mm ² (1x) at tunnel terminal 6 mm ² - 12 mm ² (1x) at box terminal 6 mm ² - 11 mm ² (1x) direct at switch rear-side connection |
| TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE) | 16 mm ² (1x) at tunnel terminal |
| TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE) | 4 mm ² - 350 mm ² (1x) at tunnel terminal 4 mm ² - 3/0 mm ² (1x) direct at switch rear-side connection 4 mm ² - 350 mm ² (1x) at box terminal |
| HANDLE TYPE | Rocker lever |
| INSTANTANEOUS CURRENT SETTING (II) - MAX | 350 A |
| INSTANTANEOUS CURRENT SETTING (II) - MIN | 350 A |
| NUMBER OF OPERATIONS PER HOUR - MAX | 120 |
| OVERLOAD CURRENT SETTING (IR) - MAX | 25 A |
| OVERLOAD CURRENT SETTING (IR) - MIN | 25 A |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ | 30 kA |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT | 25 kA |

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| 400/415 V, 50/60 HZ | |
| RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ | 18.5 kA |
| RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ | 53 kA |
| RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ | 53 kA |
| STANDARD TERMINALS | Screw terminal |
| RATED OPERATING VOLTAGE UE (UL) - MAX | 600Y/347 V, 480 V |
| RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ | 63 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 |

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