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## Eaton 103046

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 5A, short-circuit protective device

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| <b>PRODUCT NAME</b>         | Eaton Moeller series NZM - Molded case circuit breaker  |
| <b>CATALOG NUMBER</b>       | 103046  |
| <b>PRODUCT LENGTH/DEPTH</b> | 149 mm  |
| <b>PRODUCT HEIGHT</b>       | 195 mm  |
| <b>PRODUCT WIDTH</b>        | 105 mm  |
| <b>PRODUCT WEIGHT</b>       | 2.345 kg  |
| <b>COMPLIANCES</b>          | RoHS conform  |
| <b>CERTIFICATIONS</b>       | UL 489<br>Specially designed for North America<br>CSA certified<br>UL (File No. E31593)<br>CSA (Class No. 1432-01)<br>CSA-C22.2 No. 5-09<br>UL/CSA<br>CSA (File No. 22086)<br>UL listed<br>UL (Category Control Number DKPU2) |



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| <b>AMPERAGE RATING</b>  | 5 A  |
| <b>VOLTAGE RATING</b>   | 690 V - 690 V  |
| <b>10.10 TEMPERATURE RISE</b>   | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| <b>10.11 SHORT-CIRCUIT RATING</b>   | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| <b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>  | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| <b>10.13 MECHANICAL FUNCTION</b>  | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |
| <b>10.2.2 CORROSION RESISTANCE</b>  | Meets the product standard's requirements.   |
| <b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>                         | Meets the product standard's requirements.   |
| <b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>       | Meets the product standard's requirements.   |
| <b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b> | Meets the product standard's requirements.   |
| <b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>                                 | Meets the product standard's requirements.   |
| <b>10.2.5 LIFTING</b>   | Does not apply, since the entire switchgear needs to be evaluated.   |
| <b>10.2.6 MECHANICAL IMPACT</b>   | Does not apply, since the entire switchgear needs to be evaluated.   |
| <b>10.2.7 INSCRIPTIONS</b>  | Meets the product standard's requirements.   |
| <b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>  | Does not apply, since the entire switchgear needs to be evaluated.   |
| <b>10.4 CLEARANCES AND</b>  | Meets the product  |

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| <b>CREEPAGE DISTANCES</b>                                       | standard's requirements.   |
| <b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>                   | Does not apply, since the entire switchgear needs to be evaluated.                                   |
| <b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>   | Does not apply, since the entire switchgear needs to be evaluated.                                   |
| <b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>        | Is the panel builder's responsibility.   |
| <b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>                 | Is the panel builder's responsibility.   |
| <b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>                 | Is the panel builder's responsibility.   |
| <b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>                         | Is the panel builder's responsibility.   |
| <b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b> | Is the panel builder's responsibility.   |
| <b>POLLUTION DEGREE</b>   | 3  |
| <b>LIFESPAN, MECHANICAL</b>                                     | 20000 operations   |
| <b>MOUNTING METHOD</b>  | Fixed<br>Built-in device fixed built-in technique  |
| <b>CLIMATIC PROOFING</b>  | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30                       |
| <b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT</b>            | 0.35 W   |
| <b>ISOLATION</b>  | 300 V AC (between the auxiliary contacts)<br>500 V AC (between auxiliary contacts and main contacts) |
| <b>AMBIENT OPERATING TEMPERATURE - MAX</b>                      | 70 °C  |
| <b>AMBIENT OPERATING TEMPERATURE - MIN</b>                      | -25 °C   |
| <b>AMBIENT STORAGE TEMPERATURE - MAX</b>                        | 70 °C  |
| <b>AMBIENT STORAGE TEMPERATURE - MIN</b>                        | 40 °C  |
| <b>PROTECTION AGAINST DIRECT CONTACT</b>                        | Finger and back-of-hand proof to VDE 0106 part 100   |
| <b>RATED INSULATION VOLTAGE (UI)</b>                            | 1000 V   |
| <b>RATED OPERATING</b>  | 1.1 kW   |

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| <b>POWER AT AC-3, 230 V</b>                       |   |
| <b>RATED OPERATING POWER AT AC-3, 400 V</b>       | 2.2 kW  |
| <b>SWITCH OFF TECHNIQUE</b>                       | Magnetic  |
| <b>DEGREE OF PROTECTION</b>                       | IP20 (basic degree of protection, in the operating controls area)<br>IP20   |
| <b>DIRECTION OF INCOMING SUPPLY</b>               | As required   |
| <b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b> | Screw connection  |
| <b>OVERVOLTAGE CATEGORY</b>                       | III   |
| <b>DEGREE OF PROTECTION (IP), FRONT SIDE</b>      | IP40 (with insulating surround)<br>IP66 (with door coupling rotary handle)  |
| <b>DEGREE OF PROTECTION (TERMINATIONS)</b>        | IP00 (terminations, phase isolator and strip terminal)<br>IP10 (tunnel terminal)  |
| <b>NUMBER OF POLES</b>                            | Three-pole  |
| <b>TERMINAL CAPACITY (COPPER STRIP)</b>           | Max. 10 segments of 16 mm x 0.8 mm at rear-side connection (punched)<br>Max. 10 segments of 16 mm x 0.8 mm at box terminal<br>Min. 2 segments of 9 mm x 0.8 mm at box terminal<br>Min. 2 segments of 16 mm x 0.8 mm at rear-side connection (punched) |
| <b>LIFESPAN, ELECTRICAL</b>                       | 10000 operations at 400 V AC-1<br>5000 operations at 690 V AC-3<br>6500 operations at 415 V AC-3<br>7500 operations at 690 V AC-1<br>6500 operations at 400 V AC-3  |
| <b>FUNCTIONS</b>                                  | Short-circuit protection  |
| <b>TYPE</b>                                       | Circuit breaker   |
| <b>SPECIAL FEATURES</b>                           | <ul style="list-style-type: none"> <li>Rated current = rated uninterrupted current: 5 A</li> <li>This circuit-breaker</li> </ul>  |

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|  | <p>is only allowed to be used for UL/CSA applications.</p> <ul style="list-style-type: none"> <li>• Motor protection in conjunction with contactor and overload relay</li> <li>• With short-circuit release</li> <li>• Without overload release Ir</li> </ul> |
| <b>APPLICATION</b>   | Branch circuits, feeder circuits  |
| <b>SHOCK RESISTANCE</b>  | 20 g (half-sinusoidal shock 20 ms)  |
| <b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>                   | 5 A   |
| <b>RATED SHORT-TIME WITHSTAND CURRENT (T = 0.3 S)</b>                                  | 1.9 kA  |
| <b>RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)</b>                                    | 1.9 kA  |
| <b>SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX</b>                                 | 55 A  |
| <b>SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN</b>                                 | 30 A  |
| <b>HANDLE TYPE</b>   | Rocker lever  |
| <b>INSTANTANEOUS CURRENT SETTING (II) - MAX</b>  | 55 A  |
| <b>INSTANTANEOUS CURRENT SETTING (II) - MIN</b>  | 30 A  |
| <b>NUMBER OF OPERATIONS PER HOUR - MAX</b>   | 120   |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ</b> | 150 kA  |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ</b>     | 150 kA  |
| <b>STANDARD TERMINALS</b>  | Screw terminal  |
| <b>RATED OPERATING VOLTAGE UE (UL) - MAX</b>   | 600 Y / 347 V, 480 V  |
| <b>RELEASE SYSTEM</b>  | Thermomagnetic release  |

