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## Eaton 265795

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 140A, L2-ME140

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| <b>PRODUCT NAME</b>             | Eaton Moeller series NZM<br>molded case circuit<br>breaker electronic |
| <b>CATALOG NUMBER</b>           | 265795                                                                |
| <b>PRODUCT<br/>LENGTH/DEPTH</b> | 149 mm                                                                |
| <b>PRODUCT HEIGHT</b>           | 184 mm                                                                |
| <b>PRODUCT WIDTH</b>            | 105 mm                                                                |
| <b>PRODUCT WEIGHT</b>           | 2.481 kg                                                              |
| <b>COMPLIANCES</b>              | RoHS conform                                                          |
| <b>CERTIFICATIONS</b>           | IEC<br>IEC/EN 60947                                                   |

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| AMPERAGE RATING                                                                  | 140 A                                                                                                                            |
| VOLTAGE RATING                                                                   | 690 V - 690 V                                                                                                                    |
| CIRCUIT BREAKER FRAME TYPE                                                       | NZM2                                                                                                                             |
| 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.                                                                                       |
| 10.3 DEGREE OF PROTECTION OF                                                     | Does not apply, since the entire switchgear needs to                                                                             |

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|                      | <a href="#">eaton-circuit-breaker-nzm-mccb-characteristic-curve-053.eps</a>                                                                                |
| CHARACTERISTIC CURVE | <a href="#">eaton-circuit-breaker-nzm-mccb-characteristic-curve-007.eps</a><br><a href="#">eaton-circuit-breaker-nzm-mccb-characteristic-curve-006.eps</a> |
| □□□                  | <a href="#">eaton-manual-motor-starters-starter-msc-r-reversing-starter-wiring-diagram.eps</a>                                                             |
| □□                   | <a href="#">eaton-circuit-breaker-nzm-mccb-dimensions-019.eps</a>                                                                                          |

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| <b>ASSEMBLIES</b>                                               | be evaluated.                                                                                        |
| <b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>                   | Meets the product 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>FITTED WITH:</b>                                             | Thermal protection                                                                                   |
| <b>POLLUTION DEGREE</b>                                         | 3                                                                                                    |
| <b>LIFESPAN, MECHANICAL</b>                                     | 20000 operations                                                                                     |
| <b>UTILIZATION CATEGORY</b>                                     | A (IEC/EN 60947-2)                                                                                   |
| <b>MOUNTING METHOD</b>                                          | Built-in device fixed built-in technique<br>Fixed                                                    |
| <b>CLIMATIC PROOFING</b>                                        | Damp heat, cyclic, to IEC 60068-2-30<br>Damp heat, constant, to IEC 60068-2-78                       |
| <b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT</b>            | 16.17 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                                                       |

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|                                                   | 100                                                                                                                                                                                                                                                                                                           |
| <b>RATED INSULATION VOLTAGE (UI)</b>              | 1000 V                                                                                                                                                                                                                                                                                                        |
| <b>RATED OPERATING POWER AT AC-3, 230 V</b>       | 140 kW                                                                                                                                                                                                                                                                                                        |
| <b>RATED OPERATING POWER AT AC-3, 400 V</b>       | 68 kW                                                                                                                                                                                                                                                                                                         |
| <b>SWITCH OFF TECHNIQUE</b>                       | Electronic                                                                                                                                                                                                                                                                                                    |
| <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>RATED OPERATIONAL CURRENT</b>                  | 134 A (690 V AC-3)<br>134 A (400 V AC-3)                                                                                                                                                                                                                                                                      |
| <b>DEGREE OF PROTECTION (IP), FRONT SIDE</b>      | IP66 (with door coupling rotary handle)<br>IP40 (with insulating surround)                                                                                                                                                                                                                                    |
| <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>           | Min. 2 segments of 9 mm x 0.8 mm at box terminal<br>Max. 10 segments of 24 mm x 0.8 mm at rear-side connection (punched)<br>Min. 2 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>Max. 8 segments of 24 mm x 1 mm (2x) at box terminal |
| <b>LIFESPAN, ELECTRICAL</b>                       | 10000 operations at 400 V AC-1<br>7500 operations at 690 V AC-1<br>6500 operations at 400 V AC-3<br>10000 operations at 415 V AC-1<br>5000 operations at 690 V AC-3                                                                                                                                           |

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|                         | 6500 operations at 415 V<br>AC-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>FUNCTIONS</b>        | Motor protection<br>Phase failure sensitive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>TYPE</b>             | Circuit breaker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>SPECIAL FEATURES</b> | <ul style="list-style-type: none"> <li>• IEC/EN 60947-4-1, IEC/EN 60947-2</li> <li>• The circuit-breaker fulfills all requirements for AC-3 switching category.</li> <li>• R.m.s. value measurement and "thermal memory"</li> <li>• Adjustable time delay setting to overcome current peaks <math>I_r</math> at <math>6 \times I_r</math> also infinity (without overload releases)</li> <li>• All AC-3 rating data applies to direct switching by the circuit-breaker under normal operating conditions. If, for example, a contactor takes over AC-3 switching under normal operating conditions, the full rated uninterrupted current applies to the circuit-breaker, <math>I_n = I_u</math>.</li> <li>• 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 <math>I_{cn}</math>)</li> <li>• Rated current = rated uninterrupted current: 140 A</li> </ul> |
| <b>APPLICATION</b>      | Use in unearthed supply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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|                                                                                                    | systems at 690 V                      |
| <b>SHOCK RESISTANCE</b>                                                                            | 20 g (half-sinusoidal shock<br>20 ms) |
| <b>RATED OPERATIONAL<br/>CURRENT FOR SPECIFIED<br/>HEAT DISSIPATION (IN)</b>                       | 140 A                                 |
| <b>RATED SHORT-TIME<br/>WITHSTAND CURRENT (T<br/>= 0.3 S)</b>                                      | 1.3 kA                                |
| <b>RATED SHORT-TIME<br/>WITHSTAND CURRENT (T<br/>= 1 S)</b>                                        | 1.3 kA                                |
| <b>SHORT-CIRCUIT RELEASE<br/>NON-DELAYED SETTING -<br/>MAX</b>                                     | 1960 A                                |
| <b>SHORT-CIRCUIT RELEASE<br/>NON-DELAYED SETTING -<br/>MIN</b>                                     | 280 A                                 |
| <b>HANDLE TYPE</b>                                                                                 | Rocker lever                          |
| <b>INSTANTANEOUS<br/>CURRENT SETTING (II) -<br/>MAX</b>                                            | 1960 A                                |
| <b>INSTANTANEOUS<br/>CURRENT SETTING (II) -<br/>MIN</b>                                            | 280 A                                 |
| <b>NUMBER OF<br/>OPERATIONS PER HOUR -<br/>MAX</b>                                                 | 120                                   |
| <b>OVERLOAD CURRENT<br/>SETTING (IR) - MAX</b>                                                     | 140 A                                 |
| <b>OVERLOAD CURRENT<br/>SETTING (IR) - MIN</b>                                                     | 70 A                                  |
| <b>RATED SHORT-CIRCUIT<br/>BREAKING CAPACITY ICS<br/>(IEC/EN 60947) AT 230 V,<br/>50/60 HZ</b>     | 150 kA                                |
| <b>RATED SHORT-CIRCUIT<br/>BREAKING CAPACITY ICS<br/>(IEC/EN 60947) AT<br/>400/415 V, 50/60 HZ</b> | 130 kA                                |
| <b>RATED SHORT-CIRCUIT<br/>BREAKING CAPACITY ICS<br/>(IEC/EN 60947) AT 440 V,<br/>50/60 HZ</b>     | 130 kA                                |
| <b>RATED SHORT-CIRCUIT<br/>BREAKING CAPACITY ICS<br/>(IEC/EN 60947) AT 525 V,<br/>50/60 HZ</b>     | 100 kA                                |
| <b>RATED SHORT-CIRCUIT<br/>BREAKING CAPACITY ICS<br/>(IEC/EN 60947) AT 690 V,<br/>50/60 HZ</b>     | 80 kA                                 |

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| <b>STANDARD TERMINALS</b>                                    | Screw terminal                                                                                                                                                                                                                                                                                                                                                                        |
| <b>OPTIONAL TERMINALS</b>                                    | Box terminal. Connection on rear. Tunnel terminal                                                                                                                                                                                                                                                                                                                                     |
| <b>RELEASE SYSTEM</b>                                        | Electronic release                                                                                                                                                                                                                                                                                                                                                                    |
| <b>SHORT-CIRCUIT TOTAL BREAKTIME</b>                         | < 10 ms                                                                                                                                                                                                                                                                                                                                                                               |
| <b>TERMINAL CAPACITY (ALUMINUM SOLID CONDUCTOR/CABLE)</b>    | 16 mm <sup>2</sup> (1x) at tunnel terminal<br>10 mm <sup>2</sup> - 16 mm <sup>2</sup> (1x) direct at switch rear-side connection<br>10 mm <sup>2</sup> - 16 mm <sup>2</sup> (2x) direct at switch rear-side connection                                                                                                                                                                |
| <b>TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)</b> | 25 mm <sup>2</sup> - 50 mm <sup>2</sup> (1x) direct at switch rear-side connection<br>25 mm <sup>2</sup> - 50 mm <sup>2</sup> (2x) direct at switch rear-side connection<br>25 mm <sup>2</sup> - 185 mm <sup>2</sup> (1x) at tunnel terminal                                                                                                                                          |
| <b>TERMINAL CAPACITY (CONTROL CABLE)</b>                     | 0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> (1x)<br>0.75 mm <sup>2</sup> - 1.5 mm <sup>2</sup> (2x)                                                                                                                                                                                                                                                                                    |
| <b>TERMINAL CAPACITY (COPPER BUSBAR)</b>                     | Min. 16 mm x 5 mm direct at switch rear-side connection<br>M8 at rear-side screw connection<br>Max. 24 mm x 8 mm direct at switch rear-side connection                                                                                                                                                                                                                                |
| <b>TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)</b>      | 10 mm <sup>2</sup> - 16 mm <sup>2</sup> (1x) direct at switch rear-side connection<br>10 mm <sup>2</sup> - 16 mm <sup>2</sup> (1x) at box terminal<br>16 mm <sup>2</sup> (1x) at tunnel terminal<br>6 mm <sup>2</sup> - 16 mm <sup>2</sup> (2x) at box terminal<br>6 mm <sup>2</sup> - 16 mm <sup>2</sup> (2x) direct at switch rear-side connection                                  |
| <b>TERMINAL CAPACITY (COPPER STRANDED CONDUCTOR/CABLE)</b>   | 25 mm <sup>2</sup> - 185 mm <sup>2</sup> (1x) at 1-hole tunnel terminal<br>25 mm <sup>2</sup> - 185 mm <sup>2</sup> (1x) at box terminal<br>25 mm <sup>2</sup> - 185 mm <sup>2</sup> (1x) direct at switch rear-side connection<br>25 mm <sup>2</sup> - 70 mm <sup>2</sup> (2x) direct at switch rear-side connection<br>25 mm <sup>2</sup> - 70 mm <sup>2</sup> (2x) at box terminal |

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| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICU<br>(IEC/EN 60947) AT<br>400/415 V, 50/60 HZ | 130 kA  |
| RATED SHORT-CIRCUIT<br>MAKING CAPACITY ICM<br>AT 400/415 V, 50/60 HZ                     | 330 kA  |
| RATED SHORT-CIRCUIT<br>MAKING CAPACITY ICM<br>AT 440 V, 50/60 HZ                         | 286 kA  |
| RATED SHORT-CIRCUIT<br>MAKING CAPACITY ICM<br>AT 525 V, 50/60 HZ                         | 220 kA  |
| RATED SHORT-CIRCUIT<br>MAKING CAPACITY ICM<br>AT 690 V, 50/60 HZ                         | 176 kA  |
| RATED SHORT-CIRCUIT<br>MAKING CAPACITY ICM<br>AT 240 V, 50/60 HZ                         | 330 kA  |
| RATED IMPULSE<br>WITHSTAND VOLTAGE<br>(UIMP) AT AUXILIARY<br>CONTACTS                    | 6000 V  |
| RATED IMPULSE<br>WITHSTAND VOLTAGE<br>(UIMP) AT MAIN<br>CONTACTS                         | 8000 V  |
| POWER LOSS                                                                               | 16.17 W |

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