



□□□□□

## Eaton 265727

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 50A, B1-S50

□□□□

|                                 |                                                                     |
|---------------------------------|---------------------------------------------------------------------|
| <b>PRODUCT NAME</b>             | Eaton Moeller series NZM<br>molded case circuit<br>breaker magnetic |
| <b>CATALOG NUMBER</b>           | 265727                                                              |
| <b>PRODUCT<br/>LENGTH/DEPTH</b> | 88 mm                                                               |
| <b>PRODUCT HEIGHT</b>           | 145 mm                                                              |
| <b>PRODUCT WIDTH</b>            | 90 mm                                                               |
| <b>PRODUCT WEIGHT</b>           | 1.046 kg                                                            |
| <b>COMPLIANCES</b>              | RoHS conform                                                        |
| <b>CERTIFICATIONS</b>           | IEC<br>IEC/EN 60947                                                 |



Powering Business Worldwide

|                                                                                         |                                                                                                                                  |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>USED WITH</b>                                                                        | Door coupling handle<br>PKZ0                                                                                                     |
| <b>AMPERAGE RATING</b>                                                                  | 50 A                                                                                                                             |
| <b>VOLTAGE RATING</b>                                                                   | 440 V - 440 V                                                                                                                    |
| <b>CIRCUIT BREAKER FRAME TYPE</b>                                                       | NZM1                                                                                                                             |
| <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.                                                                                       |

|                      |                                                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------|
|                      | <a href="#">eaton-circuit-breaker-nzm-mccb-characteristic-curve-058.eps</a>                          |
| CHARACTERISTIC CURVE | <a href="#">eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-038.eps</a> |
|                      | <a href="#">eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-032.eps</a> |
| □□                   | <a href="#">eaton-circuit-breaker-nzm-mccb-dimensions-017.eps</a>                                    |
|                      | <a href="#">eaton-circuit-breaker-switch-nzm-mccb-dimensions-014.eps</a>                             |

|                                                                 |                                                                                                      |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <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 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>POLLUTION DEGREE</b>                                         | 3                                                                                                    |
| <b>LIFESPAN, MECHANICAL</b>                                     | 20000 operations                                                                                     |
| <b>UTILIZATION CATEGORY</b>                                     | A (IEC/EN 60947-2)                                                                                   |
| <b>MOUNTING METHOD</b>                                          | Fixed<br>Built-in device fixed built-in technique                                                    |
| <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>            | 13.2 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</b>                                       | Finger and back-of-hand                                                                              |

|                                                   |                                                                                                                                                                                                                                          |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DIRECT CONTACT</b>                             | proof to VDE 0106 part 100                                                                                                                                                                                                               |
| <b>RATED INSULATION VOLTAGE (UI)</b>              | 690 V                                                                                                                                                                                                                                    |
| <b>RATED OPERATING POWER AT AC-3, 230 V</b>       | 15 kW                                                                                                                                                                                                                                    |
| <b>RATED OPERATING POWER AT AC-3, 400 V</b>       | 22 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> | Other                                                                                                                                                                                                                                    |
| <b>OVERVOLTAGE CATEGORY</b>                       | III                                                                                                                                                                                                                                      |
| <b>RATED OPERATIONAL CURRENT</b>                  | 41 A (400 V AC-3)                                                                                                                                                                                                                        |
| <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>        | IP10 (tunnel terminal)<br>IP00 (terminations, phase isolator and strip terminal)                                                                                                                                                         |
| <b>NUMBER OF POLES</b>                            | Three-pole                                                                                                                                                                                                                               |
| <b>TERMINAL CAPACITY (COPPER STRIP)</b>           | Max. 9 segments of 9 mm x 0.8 mm at box terminal<br>Min. 2 segments of 9 mm x 0.8 mm at box terminal                                                                                                                                     |
| <b>LIFESPAN, ELECTRICAL</b>                       | 7500 operations at 415 V AC-1<br>7500 operations at 400 V AC-1                                                                                                                                                                           |
| <b>FUNCTIONS</b>                                  | Short-circuit protection                                                                                                                                                                                                                 |
| <b>TYPE</b>                                       | Circuit breaker                                                                                                                                                                                                                          |
| <b>SPECIAL FEATURES</b>                           | <ul style="list-style-type: none"> <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)</li> </ul> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | lcn) <ul style="list-style-type: none"> <li>• Motor protection in conjunction with overload relay</li> <li>• With short-circuit release</li> <li>• Without overload release <math>I_r</math></li> <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>• Rated current = rated uninterrupted current: 50 A</li> <li>• Terminal capacity hint: Up to 95 mm<sup>2</sup> can be connected depending on the cable manufacturer.</li> </ul> |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                      |                                          |
|----------------------------------------------------------------------|------------------------------------------|
| <b>APPLICATION</b>                                                   | Use in unearthed supply systems at 440 V |
| <b>SHOCK RESISTANCE</b>                                              | 20 g (half-sinusoidal shock 20 ms)       |
| <b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b> | 50 A                                     |
| <b>SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX</b>               | 700 A                                    |
| <b>SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN</b>               | 400 A                                    |
| <b>HANDLE TYPE</b>                                                   | Rocker lever                             |
| <b>INSTANTANEOUS CURRENT SETTING (II) - MAX</b>                      | 14 A                                     |
| <b>INSTANTANEOUS CURRENT SETTING (II) - MIN</b>                      | 8 A                                      |
| <b>NUMBER OF OPERATIONS PER HOUR - MAX</b>                           | 120                                      |
| <b>OVERLOAD CURRENT SETTING (IR) - MAX</b>                           | 0 A                                      |
| <b>OVERLOAD CURRENT SETTING (IR) - MIN</b>                           | 0 A                                      |
| <b>RATED SHORT-CIRCUIT</b>                                           | 30 kA                                    |

|                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BREAKING CAPACITY ICS<br/>(IEC/EN 60947) AT 230 V,<br/>50/60 HZ</b>                             |                                                                                                                                                                                                                                                                                                                                                                           |
| <b>RATED SHORT-CIRCUIT<br/>BREAKING CAPACITY ICS<br/>(IEC/EN 60947) AT<br/>400/415 V, 50/60 HZ</b> | 18.5 kA                                                                                                                                                                                                                                                                                                                                                                   |
| <b>RATED SHORT-CIRCUIT<br/>BREAKING CAPACITY ICS<br/>(IEC/EN 60947) AT 440 V,<br/>50/60 HZ</b>     | 18.5 kA                                                                                                                                                                                                                                                                                                                                                                   |
| <b>STANDARD TERMINALS</b>                                                                          | Box terminal                                                                                                                                                                                                                                                                                                                                                              |
| <b>OPTIONAL TERMINALS</b>                                                                          | Connection on rear. Screw<br>terminal. Tunnel terminal                                                                                                                                                                                                                                                                                                                    |
| <b>RELEASE SYSTEM</b>                                                                              | Thermomagnetic release                                                                                                                                                                                                                                                                                                                                                    |
| <b>SHORT-CIRCUIT TOTAL<br/>BREAKTIME</b>                                                           | < 10 ms                                                                                                                                                                                                                                                                                                                                                                   |
| <b>TERMINAL CAPACITY<br/>(ALUMINUM SOLID<br/>CONDUCTOR/CABLE)</b>                                  | 16 mm <sup>2</sup> (1x) at tunnel<br>terminal<br>10 mm <sup>2</sup> - 16 mm <sup>2</sup> (1x)<br>direct at switch rear-side<br>connection<br>10 mm <sup>2</sup> - 16 mm <sup>2</sup> (2x)<br>direct at switch rear-side<br>connection                                                                                                                                     |
| <b>TERMINAL CAPACITY<br/>(ALUMINUM STRANDED<br/>CONDUCTOR/CABLE)</b>                               | 25 mm <sup>2</sup> - 35 mm <sup>2</sup> (1x)<br>direct at switch rear-side<br>connection<br>25 mm <sup>2</sup> - 35 mm <sup>2</sup> (2x)<br>direct at switch rear-side<br>connection<br>25 mm <sup>2</sup> - 95 mm <sup>2</sup> (1x) at<br>tunnel terminal                                                                                                                |
| <b>TERMINAL CAPACITY<br/>(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<br/>(COPPER BUSBAR)</b>                                                       | Min. 12 mm x 5 mm direct<br>at switch rear-side<br>connection<br>Max. 16 mm x 5 mm direct<br>at switch rear-side<br>connection<br>M6 at rear-side screw<br>connection                                                                                                                                                                                                     |
| <b>TERMINAL CAPACITY<br/>(COPPER SOLID<br/>CONDUCTOR/CABLE)</b>                                    | 10 mm <sup>2</sup> - 16 mm <sup>2</sup> (1x) at<br>box terminal<br>6 mm <sup>2</sup> - 16 mm <sup>2</sup> (2x) at<br>box terminal<br>10 mm <sup>2</sup> - 16 mm <sup>2</sup> (1x)<br>direct at switch rear-side<br>connection<br>6 mm <sup>2</sup> - 16 mm <sup>2</sup> (2x) direct<br>at switch rear-side<br>connection<br>16 mm <sup>2</sup> (1x) at tunnel<br>terminal |

|                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>TERMINAL CAPACITY<br/>(COPPER STRANDED<br/>CONDUCTOR/CABLE)</b>                                 | 25 mm <sup>2</sup> (2x) direct at<br>switch rear-side<br>connection<br>10 mm <sup>2</sup> - 70 mm <sup>2</sup> (1x) at<br>box terminal<br>10 mm <sup>2</sup> - 70 mm <sup>2</sup> (1x)<br>direct at switch rear-side<br>connection<br>6 mm <sup>2</sup> - 25 mm <sup>2</sup> (2x) at<br>box terminal<br>25 mm <sup>2</sup> - 95 mm <sup>2</sup> (1x) at 1-<br>hole tunnel terminal |
| <b>RATED SHORT-CIRCUIT<br/>BREAKING CAPACITY ICU<br/>(IEC/EN 60947) AT<br/>400/415 V, 50/60 HZ</b> | 18.5 kA                                                                                                                                                                                                                                                                                                                                                                            |
| <b>RATED SHORT-CIRCUIT<br/>MAKING CAPACITY ICM<br/>AT 400/415 V, 50/60 HZ</b>                      | 53 kA                                                                                                                                                                                                                                                                                                                                                                              |
| <b>RATED SHORT-CIRCUIT<br/>MAKING CAPACITY ICM<br/>AT 440 V, 50/60 HZ</b>                          | 53 kA                                                                                                                                                                                                                                                                                                                                                                              |
| <b>RATED SHORT-CIRCUIT<br/>MAKING CAPACITY ICM<br/>AT 240 V, 50/60 HZ</b>                          | 63 kA                                                                                                                                                                                                                                                                                                                                                                              |
| <b>RATED IMPULSE<br/>WITHSTAND VOLTAGE<br/>(UIMP) AT AUXILIARY<br/>CONTACTS</b>                    | 6000 V                                                                                                                                                                                                                                                                                                                                                                             |
| <b>RATED IMPULSE<br/>WITHSTAND VOLTAGE<br/>(UIMP) AT MAIN<br/>CONTACTS</b>                         | 6000 V                                                                                                                                                                                                                                                                                                                                                                             |
| <b>POWER LOSS</b>                                                                                  | 4.2 W                                                                                                                                                                                                                                                                                                                                                                              |

|       |
|-------|
| □□□□: |
| □□□□: |
| □□□:  |
| □□:   |