## Eaton 265710

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 40A, B1-M40

| PRODUCT NAME            | Eaton Moeller series NZM<br>molded case circuit<br>breaker thermo-magnetic |
|-------------------------|--|
| CATALOG NUMBER          | 265710   |
| PRODUCT<br>LENGTH/DEPTH | 88 mm  |
| PRODUCT HEIGHT          | 145 mm   |
| PRODUCT WIDTH           | 90 mm  |
| PRODUCT WEIGHT          | 1.028 kg   |
| COMPLIANCES             | RoHS conform   |
| CERTIFICATIONS          | IEC/EN 60947<br>IEC  |



| AMPERAGE RATING   | 40 A   |
|---|--|
| VOLTAGE RATING  | 440 V - 440 V  |
| CIRCUIT BREAKER FRAME TYPE  | NZM1   |
| 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<br>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<br>FUNCTION  | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |
| 10.2.2 CORROSION<br>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<br>RESISTANCE OF<br>INSULATING MATERIALS<br>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<br>ULTRA-VIOLET (UV)<br>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<br>IMPACT   | Does not apply, since the entire switchgear needs to be evaluated.   |
| 10.2.7 INSCRIPTIONS   | Meets the product  |

|                      | eaton-circuit-breaker-nzm-<br>mccb-characteristic-curve-<br>058.eps                                  |
|----------------------|--|
| CHARACTERISTIC CURVE | eaton-circuit-breaker-<br>characteristic-power-<br>defense-mccb-<br>characteristic-curve-<br>038.eps |
|                      | eaton-circuit-breaker-<br>characteristic-power-<br>defense-mccb-<br>characteristic-curve-<br>032.eps |
|                      | eaton-cirucit-breaker-<br>switch-disconnector-<br>nzmb-il01203004z.pdf                               |
|                      | eaton-circuit-breaker-nzm-<br>mccb-dimensions-017.eps  |
|                      | eaton-circuit-breaker-<br>switch-nzm-mccb-<br>dimensions-014.eps                                     |

|  | standard's requirements.  |
|--|---|
| 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                 | ls the panel builder's responsibility.  |
| 10.9.2 POWER-<br>FREQUENCY ELECTRIC<br>STRENGTH          | Is the panel builder's responsibility.  |
| 10.9.3 IMPULSE<br>WITHSTAND VOLTAGE                      | ls the panel builder's responsibility.  |
| 10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL | ls the panel builder's responsibility.  |
| FITTED WITH:   | Thermal protection  |
| POLLUTION DEGREE   | 3   |
| MOUNTING METHOD  | Fixed<br>Built-in device fixed built-<br>in technique   |
| CLIMATIC PROOFING  | Damp heat, cyclic, to IEC<br>60068-2-30<br>Damp heat, constant, to<br>IEC 60068-2-78              |
| EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT           | 13.49 W   |
| UTILIZATION CATEGORY                                     | A (IEC/EN 60947-2)  |
| ISOLATION  | 300 V AC (between the auxiliary contacts) 500 V AC (between auxiliary contacts and main contacts) |
| AMBIENT OPERATING<br>TEMPERATURE - MAX                   | 70 °C   |
| AMBIENT OPERATING<br>TEMPERATURE - MIN                   | -25 °C  |
| AMBIENT STORAGE TEMPERATURE - MAX                        | 70 °C   |

| AMBIENT STORAGE<br>TEMPERATURE - MIN       | 40 °C   |
|--|---|
| PROTECTION AGAINST<br>DIRECT CONTACT       | Finger and back-of-hand<br>proof to VDE 0106 part<br>100  |
| RATED INSULATION<br>VOLTAGE (UI)           | 690 V   |
| RATED OPERATING<br>POWER AT AC-3, 230 V    | 11 kW   |
| RATED OPERATING<br>POWER AT AC-3, 400 V    | 18.5 kW   |
| SWITCH OFF TECHNIQUE                       | Thermomagnetic  |
| 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 | Other   |
| LIFESPAN, MECHANICAL                       | 20000 operations  |
| OVERVOLTAGE<br>CATEGORY                    | III   |
| RATED OPERATIONAL CURRENT                  | 36 A (400 V AC-3)   |
| DEGREE OF PROTECTION<br>(IP), FRONT SIDE   | IP40 (with insulating<br>surround)<br>IP66 (with door coupling<br>rotary handle)                  |
| DEGREE OF PROTECTION (TERMINATIONS)        | IP10 (tunnel terminal)<br>IP00 (terminations, phase<br>isolator and strip terminal)               |
| NUMBER OF POLES                            | Three-pole  |
| TERMINAL CAPACITY<br>(COPPER STRIP)        | Max. 9 segments of 9 mm x 0.8 mm at box terminal Min. 2 segments of 9 mm x 0.8 mm at box terminal |
| LIFESPAN, ELECTRICAL                       | 7500 operations at 415 V<br>AC-1<br>7500 operations at 400 V<br>AC-1                              |
| FUNCTIONS                                  | Motor protection Phase failure sensitive  |
| ТҮРЕ                                       | Circuit breaker   |
| SPECIAL FEATURES                           | Maximum back-up<br>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: 40 A  Terminal capacity hint: Up to 95 mm² can be connected depending on the cable manufacturer.  With phase-failure sensitivity  Tripping class 10 A  IEC/EN 60947-4-1, IEC/EN 60947-2  The circuit-breaker fulfills all requirements for AC-3 switching category. |
|---|---|
| APPLICATION   | Use in unearthed supply systems at 440 V  |
| SHOCK RESISTANCE  | 20 g (half-sinusoidal shock<br>20 ms)   |
| RATED OPERATIONAL<br>CURRENT FOR SPECIFIED<br>HEAT DISSIPATION (IN) | 40 A  |
| SHORT-CIRCUIT RELEASE<br>NON-DELAYED SETTING -<br>MAX               | 560 A   |
| SHORT-CIRCUIT RELEASE<br>NON-DELAYED SETTING -<br>MIN               | 320 A   |
| HANDLE TYPE   | Rocker lever  |
| INSTANTANEOUS<br>CURRENT SETTING (II) -<br>MAX                      | 560 A   |
| INSTANTANEOUS<br>CURRENT SETTING (II) -<br>MIN                      | 320 A   |
| NUMBER OF<br>OPERATIONS PER HOUR -                                  | 120   |
|   |   |

| MAX  |  |
|--|--|
| OVERLOAD CURRENT<br>SETTING (IR) - MAX   | 40 A   |
| OVERLOAD CURRENT<br>SETTING (IR) - MIN   | 32 A   |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICS<br>(IEC/EN 60947) AT 230 V,<br>50/60 HZ     | 30 kA  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICS<br>(IEC/EN 60947) AT<br>400/415 V, 50/60 HZ | 18.5 kA  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICS<br>(IEC/EN 60947) AT 440 V,<br>50/60 HZ     | 18.5 kA  |
| STANDARD TERMINALS   | Box terminal   |
| OPTIONAL TERMINALS   | Connection on rear. Screw terminal. Tunnel terminal  |
| RELEASE SYSTEM   | Thermomagnetic release   |
| SHORT-CIRCUIT TOTAL<br>BREAKTIME   | < 10 ms  |
| TERMINAL CAPACITY<br>(ALUMINUM SOLID<br>CONDUCTOR/CABLE)                                 | 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<br>16 mm <sup>2</sup> (1x) at tunnel<br>terminal                      |
| TERMINAL CAPACITY (ALUMINUM STRANDED CONDUCTOR/CABLE)                                    | 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 |
| TERMINAL CAPACITY<br>(CONTROL CABLE)   | 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)   |
| TERMINAL CAPACITY<br>(COPPER BUSBAR)   | M6 at rear-side screw connection Min. 12 mm x 5 mm direct at switch rear-side connection Max. 16 mm x 5 mm direct at switch rear-side connection   |
| TERMINAL CAPACITY (COPPER SOLID  | 16 mm² (1x) at tunnel<br>terminal  |

| CONDUCTOR/CABLE)   | 10 mm <sup>2</sup> - 16 mm <sup>2</sup> (1x) at box terminal 10 mm <sup>2</sup> - 16 mm <sup>2</sup> (1x) direct at switch rear-side connection 6 mm <sup>2</sup> - 16 mm <sup>2</sup> (2x) direct at switch rear-side connection 6 mm <sup>2</sup> - 16 mm <sup>2</sup> (2x) at box terminal |
|--|---|
| TERMINAL CAPACITY<br>(COPPER STRANDED<br>CONDUCTOR/CABLE)                                | 10 mm² - 70 mm² (1x) at box terminal 10 mm² - 70 mm² (1x) direct at switch rear-side connection 25 mm² - 95 mm² (1x) at 1-hole tunnel terminal 25 mm² (2x) direct at switch rear-side connection 6 mm² - 25 mm² (2x) at box terminal  |
| RATED SHORT-CIRCUIT<br>BREAKING CAPACITY ICU<br>(IEC/EN 60947) AT<br>400/415 V, 50/60 HZ | 18.5 kA   |
| RATED SHORT-CIRCUIT<br>MAKING CAPACITY ICM<br>AT 400/415 V, 50/60 HZ                     | 53 kA   |
| RATED SHORT-CIRCUIT<br>MAKING CAPACITY ICM<br>AT 440 V, 50/60 HZ                         | 53 kA   |
| RATED SHORT-CIRCUIT<br>MAKING CAPACITY ICM<br>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                                  | 6000 V  |
|  |   |

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



Eaton House 30 Pembroke Road Dublin 4, Eaton.com

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