

# Specifications



Photo is representative



## Eaton 113219

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 125A, plug-in module, C2-A125-SVE

### General specifications

|                             |  |
|-----------------------------|--|
| <b>PRODUCT NAME</b>         | Eaton Moeller series NZM molded case circuit breaker thermo-magnetic |
| <b>CATALOG NUMBER</b>       | 113219   |
| <b>MODEL CODE</b>           | NZMC2-A125-SVE   |
| <b>EAN</b>                  | 4015081127542  |
| <b>PRODUCT LENGTH/DEPTH</b> | 180 mm   |
| <b>PRODUCT HEIGHT</b>       | 245 mm   |
| <b>PRODUCT WIDTH</b>        | 105 mm   |
| <b>PRODUCT WEIGHT</b>       | 2.785 kg   |
| <b>COMPLIANCES</b>          | RoHS conform   |
| <b>CERTIFICATIONS</b>       | IEC<br>IEC/EN 60947  |



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## Product specifications

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|---|--|
| <b>AMPERAGE RATING</b>  | 125 A  |
| <b>VOLTAGE RATING</b>   | 690 V - 690 V  |
| <b>FEATURES</b>   | Motor drive optional<br>Protection unit  |
| <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  |

## Resources

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|-----------------------------------|---|
| <b>BROCHURES</b>                  | <a href="#">eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf</a><br><a href="#">eaton-digital-nzm-brochure-br013003en-en-us.pdf</a>  |
| <b>CATALOGUES</b>                 | <a href="#">eaton-digital-nzm-catalog-ca013003en-en-us.pdf</a><br><a href="#">eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-035.eps</a><br><a href="#">eaton-circuit-breaker-nzm-mccb-characteristic-curve-050.eps</a><br><a href="#">eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-031.eps</a> |
| <b>CHARACTERISTIC CURVE</b>       |   |
| <b>DECLARATIONS OF CONFORMITY</b> | <a href="#">eaton-molded-case-circuit-breaker-declaration-of-conformity-eu250290en.pdf</a>  |
| <b>INSTALLATION INSTRUCTIONS</b>  | <a href="#">eaton-circuit-breaker-plug-in-adapter-nzm2-il01219023z.pdf</a>  |
| <b>INSTALLATION VIDEOS</b>        | <a href="#">Introduction of the new digital circuit breaker NZM</a><br><a href="#">The new digital NZM Range</a>  |
| <b>MCAD MODEL</b>                 | <a href="#">DA-CS-nzm2 xsve</a><br><a href="#">DA-CD-nzm2 xsve</a>  |
| <b>PEP ECO-PASSPORT</b>           | <a href="#">eaton-molded-case-switches-pep-eato-00218-v0101-en.pdf</a>  |
| <b>TECHNICAL DATA SHEETS</b>      | <a href="#">eaton-nzm-technical-information-sheet</a>   |

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|   | 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 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>MOUNTING METHOD</b>  | DIN rail (top hat rail)<br>mounting optional<br>Plug-in unit<br>Built-in device plug-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>            | 27.61 W  |
| <b>UTILIZATION CATEGORY</b>                                     | A (IEC/EN 60947-2)   |
| <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</b>  | 70 °C  |

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| <b>TEMPERATURE - MAX</b>                                       |  |
| <b>AMBIENT STORAGE TEMPERATURE - MIN</b>                       | 40 °C  |
| <b>NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)</b>     | 0  |
| <b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b> | 0  |
| <b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>   | 0  |
| <b>PROTECTION AGAINST DIRECT CONTACT</b>                       | Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110  |
| <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>LIFESPAN, MECHANICAL</b>                                    | 20000 operations   |
| <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>LIFESPAN, ELECTRICAL</b>                                    | 10000 operations at 400 V AC-1<br>7500 operations at 415 V AC-1<br>7500 operations at 690 V AC-1<br>6500 operations at 415 V AC-3  |
| <b>SPECIAL FEATURES</b>  | <ul style="list-style-type: none"> <li>Maximum back-up fuse, if the expected short-circuit currents at the installation</li> </ul> |

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|   | <p>location exceed the switching capacity of the circuit breaker (Rated short-circuit breaking capacity I<sub>cn</sub>)</p> <ul style="list-style-type: none"> <li>Rated current = rated uninterrupted current: 125 A</li> </ul> |
| <b>APPLICATION</b>                                      | Use in unearthed supply systems at 690 V   |
| <b>SHOCK RESISTANCE</b>                                 | 20 g (half-sinusoidal shock 20 ms)   |
| <b>POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT</b>  | Front side   |
| <b>POWER LOSS</b>                                       | 27.6 W   |
| <b>SHORT-CIRCUIT TOTAL BREAKTIME</b>                    | < 10 ms  |
| <b>SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX</b>  | 1250 A   |
| <b>SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN</b>  | 750 A  |
| <b>TERMINAL CAPACITY (COPPER BUSBAR)</b>                | M8 at rear-side screw connection   |
| <b>TERMINAL CAPACITY (COPPER SOLID CONDUCTOR/CABLE)</b> | 16 mm <sup>2</sup> (1x) at tunnel terminal   |
| <b>HANDLE TYPE</b>                                      | Rocker lever   |
| <b>SHORT DELAY CURRENT SETTING (ISD) - MAX</b>          | 0 A  |
| <b>SHORT DELAY CURRENT SETTING (ISD) - MIN</b>          | 0 A  |
| <b>INSTANTANEOUS CURRENT SETTING (II) - MAX</b>         | 1250 A   |
| <b>INSTANTANEOUS CURRENT SETTING (II) - MIN</b>         | 750 A  |
| <b>NUMBER OF OPERATIONS PER HOUR - MAX</b>              | 120  |
| <b>OVERLOAD CURRENT SETTING (IR) - MAX</b>              | 125 A  |

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| <b>OVERLOAD CURRENT SETTING (IR) - MIN</b>   | 100 A          |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 230 V, 50/60 HZ</b>     | 55 kA          |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ</b> | 36 kA          |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ</b>     | 22.5 kA        |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 525 V, 50/60 HZ</b>     | 6 kA           |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 690 V, 50/60 HZ</b>     | 4 kA           |
| <b>RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 400/415 V, 50/60 HZ</b>                  | 76 kA          |
| <b>RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 440 V, 50/60 HZ</b>                      | 63 kA          |
| <b>RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 525 V, 50/60 HZ</b>                      | 24 kA          |
| <b>RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 690 V, 50/60 HZ</b>                      | 14 kA          |
| <b>STANDARD TERMINALS</b>  | Screw terminal |
| <b>RATED SHORT-CIRCUIT MAKING CAPACITY ICM AT 240 V, 50/60 HZ</b>                      | 121 kA         |
| <b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT AUXILIARY CONTACTS</b>                    | 6000 V         |
| <b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP) AT MAIN CONTACTS</b>                         | 8000 V         |
| <b>RATED INSULATION VOLTAGE (UI)</b>   | 690 V AC       |

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



**Eaton Corporation plc**  
Eaton House  
30 Pembroke Road  
Dublin 4, Ireland  
Eaton.com

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