

# Specifications



Photo is representative

## Eaton 168483

Eaton Moeller series Molded case circuit breaker, Electronic, NZMN3, 220 A, Three-pole, 690 V, Screw connection, plug-in technology

### General specifications

|                             |                                                                 |
|-----------------------------|-----------------------------------------------------------------|
| <b>PRODUCT NAME</b>         | Eaton Moeller series NZM molded case circuit breaker electronic |
| <b>CATALOG NUMBER</b>       | 168483                                                          |
| <b>MODEL CODE</b>           | NZMN3-ME220-SVE                                                 |
| <b>EAN</b>                  | 4015081649631                                                   |
| <b>PRODUCT LENGTH/DEPTH</b> | 335 mm                                                          |
| <b>PRODUCT HEIGHT</b>       | 215.2 mm                                                        |
| <b>PRODUCT WIDTH</b>        | 140 mm                                                          |
| <b>PRODUCT WEIGHT</b>       | 7.72 kg                                                         |
| <b>COMPLIANCES</b>          | RoHS conform                                                    |

### Additional information

**FUNCTIONS**

Phase failure sensitive

### Delivery programme

**AMPERAGE RATING**

220 A

**FITTED WITH:**

Thermal protection

**NUMBER OF POLES**

Three-pole

**TYPE**

Circuit breaker

## Design verification to IEC/EN 61439

|                                                                                         |                                                                                                                                  |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <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 CREEPAGE DISTANCES</b>                                           | Meets the product standard's requirements.                                                                                       |
| <b>10.5 PROTECTION</b>                                                                  | Does not apply, since the                                                                                                        |

## Design verification to IEC/EN 61439 - technical data

**EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT** 14.52 W

**RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)** 220 A

|                                                                 |                                                                    |
|-----------------------------------------------------------------|--------------------------------------------------------------------|
| <b>AGAINST ELECTRIC SHOCK</b>                                   | 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.                             |

#### Technical data - electrical

|                                                                                        |                  |
|----------------------------------------------------------------------------------------|------------------|
| <b>AMPERAGE RATING</b>                                                                 | 220 A            |
| <b>DIRECTION OF INCOMING SUPPLY</b>                                                    | As required      |
| <b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b>                                      | Screw connection |
| <b>HANDLE TYPE</b>                                                                     | Rocker lever     |
| <b>INSTANTANEOUS CURRENT SETTING (II) - MAX</b>                                        | 3080 A           |
| <b>INSTANTANEOUS CURRENT SETTING (II) - MIN</b>                                        | 440 A            |
| <b>OVERLOAD CURRENT SETTING (IR) - MAX</b>                                             | 220 A            |
| <b>OVERLOAD CURRENT SETTING (IR) - MIN</b>                                             | 110 A            |
| <b>RATED OPERATING POWER AT AC-3, 230 V</b>                                            | 55 kW            |
| <b>RATED OPERATING POWER AT AC-3, 400 V</b>                                            | 110 kW           |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 400/415 V, 50/60 HZ</b> | 50 kA            |
| <b>RATED SHORT-CIRCUIT BREAKING CAPACITY ICS (IEC/EN 60947) AT 440 V, 50/60 HZ</b>     | 50 kA            |
| <b>VOLTAGE RATING</b>                                                                  | 690 V - 690 V    |

#### Technical data - mechanical

|                             |                                   |
|-----------------------------|-----------------------------------|
| <b>DEGREE OF PROTECTION</b> | IP20                              |
| <b>MOUNTING METHOD</b>      | Built-in device plug-in technique |
| <b>SWITCH OFF TECHNIQUE</b> | Electronic                        |

## Resources

|                            |                                                                                                                                                  |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| BROCHURES                  | <a href="#">eaton-digital-nzm-brochure-br013003en-en-us.pdf</a><br><a href="#">eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf</a> |
| CATALOGUES                 | <a href="#">eaton-digital-nzm-catalog-ca013003en-en-us.pdf</a>                                                                                   |
| DECLARATIONS OF CONFORMITY | <a href="#">eaton-molded-case-circuit-breaker-declaration-of-conformity-eu250293en.pdf</a>                                                       |
| ECAD MODEL                 | <a href="#">DA-CE-ETN.NZMN3-ME220-SVE</a>                                                                                                        |
| INSTALLATION INSTRUCTIONS  | <a href="#">eaton-circuit-breaker-plugin-adapter-nzm2-il01219023z.pdf</a>                                                                        |
| INSTALLATION VIDEOS        | <a href="#">Introduction of the new digital circuit breaker NZM</a><br><a href="#">The new digital NZM Range</a>                                 |
| MCAD MODEL                 | <a href="#">eaton-motor-protector-mcad-drawings-nzmh3-me220-sve.dwg</a><br><a href="#">nzmh3_me220_sve.stp</a>                                   |
| PEP ECO-PASSPORT           | <a href="#">eaton-molded-case-switches-pep-eato-00219-v0101-en.pdf</a>                                                                           |
| TECHNICAL DATA SHEETS      | <a href="#">eaton-nzm-technical-information-sheet</a>                                                                                            |

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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