

# Specifications



Photo is representative

## Eaton 259754

Eaton Moeller series NZM Shunt release, 24VAC/DC, for NZM2/3

### General specifications

|                      |                                                                                                                                                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PRODUCT NAME         | Eaton Moeller series NZM Shunt release                                                                                                                                                               |
| CATALOG NUMBER       | 259754                                                                                                                                                                                               |
| MODEL CODE           | NZM2/3-XA24AC/DC                                                                                                                                                                                     |
| EAN                  | 4015082597542                                                                                                                                                                                        |
| PRODUCT LENGTH/DEPTH | 42 mm                                                                                                                                                                                                |
| PRODUCT HEIGHT       | 90 mm                                                                                                                                                                                                |
| PRODUCT WIDTH        | 30 mm                                                                                                                                                                                                |
| PRODUCT WEIGHT       | 0.094 kg                                                                                                                                                                                             |
| COMPLIANCES          | UL/CSA<br>IEC<br>RoHS conform                                                                                                                                                                        |
| CERTIFICATIONS       | CE marking<br>CSA certified<br>UL listed<br>IEC60947<br>UL (Category Control Number DIHS)<br>CSA (Class No. 1437-01)<br>UL (File No. E140305)<br>CSA (File No. 22086)<br>CSA-C22.2 No. 5-09<br>UL489 |

## Delivery programme

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>FRAME</b>            | NZM2/3                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>SPECIAL FEATURES</b> | <ul style="list-style-type: none"> <li>Switches are tripped by a voltage pulse or by the application of uninterrupted voltage.</li> <li>If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on.</li> <li>Shunt releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.</li> </ul> |
| <b>SUITABLE FOR</b>     | Off-load switch                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>TYPE</b>             | <ul style="list-style-type: none"> <li>Accessory</li> <li>Shunt release</li> </ul>                                                                                                                                                                                                                                                                                                                                 |
| <b>USED WITH</b>        | NZM2(-4), N(S)2(-4)<br>NZM3(-4), N(S)3(-4)                                                                                                                                                                                                                                                                                                                                                                         |

## 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                                                                                                        |

|                                                                 |                                                                    |
|-----------------------------------------------------------------|--------------------------------------------------------------------|
| <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>ELECTRIC CONNECTION TYPE</b>                             | Screw connection                                    |
| <b>FREQUENCY RATING</b>                                     | 50 Hz / 60 Hz / 200 Hz / 400 Hz, DC (shunt release) |
| <b>MINIMUM COMMAND TIME - MAX</b>                           | 15 ms                                               |
| <b>MINIMUM COMMAND TIME - MIN</b>                           | 10 ms                                               |
| <b>PICK-UP POWER CONSUMPTION (SHUNT RELEASE)</b>            | 2.5 VA/W                                            |
| <b>RATED CONTROL SUPPLY VOLTAGE</b>                         | 24 V AC/DC                                          |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX</b> | 24 V                                                |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN</b> | 24 V                                                |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX</b> | 24 V                                                |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN</b> | 24 V                                                |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX</b>        | 24 V                                                |
| <b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN</b>        | 24 V                                                |
| <b>RATED CONTROL VOLTAGE (RELAY CONTACTS)</b>               | 24 V DC<br>24 V AC                                  |
| <b>REACTION TIME</b>                                        | 20 ms                                               |
| <b>TIME ON DUTY - MAX</b>                                   | ∞                                                   |
| <b>VOLTAGE RATING</b>                                       | 0.7 - 1.1 x Us                                      |
| <b>VOLTAGE RATING AT AC (X US) - MAX</b>                    | 1.1                                                 |
| <b>VOLTAGE RATING AT AC (X US) - MIN</b>                    | 0.7                                                 |
| <b>VOLTAGE TYPE</b>                                         | AC/DC                                               |

## Technical data - mechanical

**CONNECTION TYPE** With bolt connection

**NUMBER OF CONTACTS (CHANGE-OVER CONTACTS)** 0

**NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)** 0

**NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)** 0

### SPECIAL FEATURES

- Switches are tripped by a voltage pulse or by the application of uninterrupted voltage.
- If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on.
- Shunt releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.

## Technical data - mechanical - terminals

### TERMINAL CAPACITY (SOLID/FLEXIBLE CONDUCTOR)

0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (2x)  
for undervoltage releases,  
off-delayed with ferrule  
18 - 14 AWG (1x) at shunt  
release  
18 - 14 AWG (1x) for  
undervoltage releases, off-  
delayed  
18 - 14 AWG (2x) at shunt  
release  
18 - 14 AWG (2x) for  
undervoltage releases, off-  
delayed  
0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (1x) at  
shunt release with ferrule  
0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (1x)  
for undervoltage releases,  
off-delayed with ferrule  
0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (2x) at  
shunt release with ferrule

## Resources

### BROCHURES

[eaton-feerum-the-whole-  
grain-solution-success-  
story-en-us.pdf](#)

[eaton-digital-nzm-  
brochure-br013003en-en-  
us.pdf](#)

### CATALOGUES

[eaton-digital-nzm-catalog-  
ca013003en-en-us.pdf](#)

### DRAWINGS

[eaton-circuit-breaker-  
undervoltage-nzm-mccb-  
3d-drawing-002.eps](#)

### ECAD MODEL

[ETN.NZM2\\_3-XA24AC\\_DC](#)

### INSTALLATION INSTRUCTIONS

[eaton-circuit-breaker-  
voltage-release-nzm2-3-  
il012141zu.pdf](#)

### INSTALLATION VIDEOS

[The new digital NZM  
Range](#)

[Introduction of the new  
digital circuit breaker NZM](#)

### MCAD MODEL

[eaton-int-tripping-acc-  
mcad-drawings-nzm2-3-  
xa.dwg](#)

[eaton-int-tripping-acc-  
mcad-3d-models-nzm2-3-  
xa.stp](#)

### TECHNICAL DATA SHEETS

[eaton-nzm-technical-  
information-sheet](#)

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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

© 2026 Eaton. All Rights Reserved.

Follow us on social media to get the  
latest product and support  
information.

