

# Specifications



Photo is representative

## Eaton 259810

Eaton Moeller series NZM Shunt release,  
24VAC/DC, +1early N/O, for NZM2/3

### General Specifications

PRODUCT NAME	Eaton Moeller series NZM Shunt release
CATALOG NUMBER	259810
EAN	4015082598105
PRODUCT LENGTH/DEPTH	42 mm
PRODUCT HEIGHT	90 mm
PRODUCT WIDTH	30 mm
PRODUCT WEIGHT	0.1 kg
COMPLIANCES	IEC UL/CSA RoHS conform
CERTIFICATIONS	UL (Category Control Number DIHS) CSA-C22.2 No. 5-09 CE marking UL489 UL listed CSA certified CSA (Class No. 1437-01) UL (File No. E140305) CSA (File No. 22086) IEC60947
MODEL CODE	NZM2/3-XAHIV24AC/DC

## Product specifications

<b>USED WITH</b>	NZM3(-4), N(S)3(-4) NZM2(-4), N(S)2(-4)
<b>VOLTAGE RATING</b>	0.7 - 1.1 x Us
<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.

## Resources

<b>BROCHURES</b>	<a href="#">eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf</a> <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>
<b>DRAWINGS</b>	<a href="#">eaton-circuit-breaker-undervoltage-nzm-mccb-3d-drawing-002.eps</a>
<b>ECAD MODEL</b>	<a href="#">DA-CE-ETN.NZM2_3-XAHIV24AC_DC</a>
<b>INSTALLATION INSTRUCTIONS</b>	<a href="#">eaton-circuit-breaker-voltage-release-nzm2-3-il012141zu.pdf</a>
<b>INSTALLATION VIDEOS</b>	<a href="#">Introduction of the new digital circuit breaker NZM</a> <a href="#">The new digital NZM Range</a>
<b>TECHNICAL DATA SHEETS</b>	<a href="#">eaton-nzm-technical-information-sheet</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>ELECTRIC CONNECTION TYPE</b>	Screw connection
<b>FITTED WITH:</b>	Early-make auxiliary contact
<b>FRAME</b>	NZM2/3
<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>NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)</b>	1
<b>REACTION TIME</b>	20 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</b>	24 V

<b>VOLTAGE (US) AT AC, 50 HZ - MIN</b>	
<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>SUITABLE FOR</b>	Off-load switch
<b>CONNECTION TYPE</b>	With bolt connection
<b>VOLTAGE TYPE</b>	AC/DC
<b>TERMINAL CAPACITY (SOLID/FLEXIBLE CONDUCTOR)</b>	<p>0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (2x) for undervoltage releases, off-delayed with ferrule</p> <p>0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (1x) for undervoltage releases, off-delayed with ferrule</p> <p>18 - 14 AWG (1x) for undervoltage releases, off-delayed</p> <p>0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (1x) at shunt release with ferrule</p> <p>18 - 14 AWG (2x) at shunt release</p> <p>18 - 14 AWG (2x) for undervoltage releases, off-delayed</p> <p>0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (2x) at shunt release with ferrule</p> <p>18 - 14 AWG (1x) at shunt release</p>
<b>TYPE</b>	<ul style="list-style-type: none"> <li>• Accessory</li> <li>• Shunt release</li> </ul>
<b>SPECIAL FEATURES</b>	<ul style="list-style-type: none"> <li>• Cannot be used in conjunction with NZM...-XR... remote operator.</li> <li>• If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on.</li> <li>• Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms.</li> <li>• Shunt releases cannot be installed</li> </ul>

simultaneously  
with NZM...-XHIV...  
early-make  
auxiliary contact or  
NZM...-XU...  
undervoltage  
release.

**RATED CONTROL SUPPLY  
VOLTAGE (US) AT DC -  
MAX** 24 V

**RATED CONTROL SUPPLY  
VOLTAGE (US) AT DC -  
MIN** 24 V

**VOLTAGE RATING AT AC  
(X US) - MAX** 1.1

**VOLTAGE RATING AT AC  
(X US) - MIN** .7

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

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

**UNDELAYED SHORT-  
CIRCUIT RELEASE - MIN** 0 A

**UNDELAYED SHORT-  
CIRCUIT RELEASE - MAX** 0 A

**TIME ON DUTY - MAX** ∞

**RATED CONTROL  
VOLTAGE (RELAY  
CONTACTS)** 24 V DC  
24 V AC

**PROJECT NAME:**

**PROJECT NUMBER:**

**PREPARED BY:**

**DATE:**



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