# Specifications



Photo is representative

# Eaton 259563

Eaton Moeller series NZM Undervoltage release, 110-130VAC, +2early N/O, for NZM1, L

General specifications	
PRODUCT NAME	Eaton Moeller series NZM Undervoltage release
CATALOG NUMBER	259563
MODEL CODE	NZM1-XUHIVL110-130AC
EAN	4015082595630
PRODUCT LENGTH/DEPTH	37 mm
PRODUCT HEIGHT	66 mm
PRODUCT WIDTH	32 mm
PRODUCT WEIGHT	0.056 kg
COMPLIANCES	UL/CSA IEC RoHS conform
CERTIFICATIONS	UL489 CSA-C22.2 No. 5-09 CSA (File No. 22086) UL (Category Control Number DIHS) UL listed UL (File No. E140305) CSA (Class No. 1437-01) CE marking CSA certified IEC60947
GLOBAL CATALOG	259563



Product specifications	
USED WITH	NZM1(-4), N(S)1(-4)
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 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 FUNCTION	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
10.2.2 CORROSION 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 RESISTANCE OF INSULATING MATERIALS 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 ULTRA-VIOLET (UV) 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 IMPACT	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
10.3 DEGREE OF PROTECTION OF	Does not apply, since the entire switchgear needs to

Resources	
BROCHURES	eaton-digital-nzm- brochure-br013003en-en- us.pdf
	eaton-feerum-the-whole- grain-solution-success- story-en-us.pdf
CATALOGS	eaton-digital-nzm-catalog- ca013003en-en-us.pdf
DRAWINGS	eaton-circuit-breaker- release-nzm-mccb- dimensions.eps
	eaton-circuit-breaker- undervoltage-nzm-mccb- 3d-drawing-003.eps
ECAD MODEL	DA-CE-ETN.NZM1- XUHIVL110-130AC
INSTALLATION INSTRUCTIONS	eaton-circuit-breaker- nzm1-xa-xahiv-xhiv-xu- xuhiv-il01203002z.pdf
INSTALLATION VIDEOS	The new digital NZM Range
	Introduction of the new digital circuit breaker NZM
TECHNICAL DATA SHEETS	eaton-nzm-technical- information-sheet

ASSEMBLIES	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	ls the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	ls the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	ls the panel builder's responsibility.
ELECTRIC CONNECTION TYPE	Screw connection
FITTED WITH:	Two early-make auxiliary
FILLED WILL.	contacts
FRAME	contacts NZM1
FRAME MINIMUM COMMAND	NZM1
FRAME MINIMUM COMMAND TIME - MAX MINIMUM COMMAND	NZM1 15 ms
FRAME MINIMUM COMMAND TIME - MAX MINIMUM COMMAND TIME - MIN NUMBER OF CONTACTS (NORMALLY OPEN	NZM1 15 ms 10 ms
FRAME  MINIMUM COMMAND TIME - MAX  MINIMUM COMMAND TIME - MIN  NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	NZM1 15 ms 10 ms
FRAME  MINIMUM COMMAND TIME - MAX  MINIMUM COMMAND TIME - MIN  NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)  REACTION TIME  PICK-UP POWER CONSUMPTION AT AC (UNDERVOLTAGE	NZM1 15 ms 10 ms 2 19 ms
FRAME  MINIMUM COMMAND TIME - MAX  MINIMUM COMMAND TIME - MIN  NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)  REACTION TIME  PICK-UP POWER CONSUMPTION AT AC (UNDERVOLTAGE RELEASE)  PICK-UP POWER CONSUMPTION AT DC (UNDERVOLTAGE	NZM1 15 ms 10 ms 2 19 ms 1.5 VA
FRAME  MINIMUM COMMAND TIME - MAX  MINIMUM COMMAND TIME - MIN  NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)  REACTION TIME  PICK-UP POWER CONSUMPTION AT AC (UNDERVOLTAGE RELEASE)  PICK-UP POWER CONSUMPTION AT DC (UNDERVOLTAGE RELEASE)  VOLTAGE TOLERANCE -	NZM1 15 ms 10 ms 2 19 ms 1.5 VA

VOLTAGE	
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	130 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	110 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	130 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	110 V
SUITABLE FOR	Off-load switch
CONNECTION TYPE	With 3 m connection cable instead of screw termination
VOLTAGE TYPE	AC
DROP-OUT VOLTAGE OF UNDERVOLTAGE RELEASE AC/DC - MAX	0.7 x Us
DROP-OUT VOLTAGE OF UNDERVOLTAGE RELEASE AC/DC - MIN	0.35 x Us
FUNCTIONS	Delayed
	18 - 14 AWG (2x) at shunt release
TERMINAL CAPACITY (SOLID/FLEXIBLE CONDUCTOR)	0.75 mm² - 2.5 mm² (1x) at shunt release with ferrule 0.75 mm² - 2.5 mm² (2x) at shunt release with ferrule 18 - 14 AWG (1x) for undervoltage releases, off-delayed 18 - 14 AWG (1x) at shunt release 0.75 mm² - 2.5 mm² (1x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (2x) for undervoltage releases, off-delayed 0.75 mm² - 2.5 mm² (2x) for undervoltage releases, off-delayed 0.75 mm² - 2.5 mm² (2x) for undervoltage releases, off-delayed with ferrule
(SOLID/FLEXIBLE	shunt release with ferrule 0.75 mm² - 2.5 mm² (2x) at shunt release with ferrule 18 - 14 AWG (1x) for undervoltage releases, off-delayed 18 - 14 AWG (1x) at shunt release 0.75 mm² - 2.5 mm² (1x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (2x) for undervoltage releases, off-delayed 0.75 mm² - 2.5 mm² (2x) for undervoltage releases, off-delayed 0.75 mm² - 2.5 mm² (2x) for undervoltage releases,

contacts, e.g., for earlymake connection of undervoltage release in main switch applications, as well as for interlock and load shedding circuits. For use with emergency-stop devices in connection with an emergency-stop button. When the undervoltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on. Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.

#### **POWER CONSUMPTION**

0.8 W (sealing DC) 1.5 VA (sealing AC)

## **RATED CONTROL SUPPLY**

**VOLTAGE (US) AT DC-**0 V

MAX

**RATED CONTROL SUPPLY** 

**VOLTAGE (US) AT DC -**

MIN

**NUMBER OF CONTACTS** 

(NORMALLY CLOSED

**CONTACTS)** 

0

0 V

**NUMBER OF CONTACTS** 

(CHANGE-OVER **CONTACTS)** 

0

**UNDELAYED SHORT-**

**CIRCUIT RELEASE - MIN** 

0 A

**UNDELAYED SHORT-**

**CIRCUIT RELEASE - MAX** 

0 A

**RATED CONTROL** 

**VOLTAGE (RELAY** 

130 V AC 110 V AC

**CONTACTS)** 

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	



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