

Specifications



Photo is representative

Eaton 259545

Eaton Moeller series NZM Undervoltage release, 12 V DC, +2early N/O, for NZM1

General specifications

PRODUCT NAME	Eaton Moeller series NZM Undervoltage release
CATALOG NUMBER	259545
MODEL CODE	NZM1-XUHIV12DC
EAN	4015082595456
PRODUCT LENGTH/DEPTH	37 mm
PRODUCT HEIGHT	66 mm
PRODUCT WIDTH	32 mm
PRODUCT WEIGHT	0.056 kg
COMPLIANCES	IEC UL/CSA RoHS conform
CERTIFICATIONS	CSA (File No. 22086) UL (File No. E140305) CE marking UL listed CSA-C22.2 No. 5-09 UL (Category Control Number DIHS) CSA certified IEC60947 CSA (Class No. 1437-01) UL489
GLOBAL CATALOG	259545



Powering Business Worldwide

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-004.eps
ECAD MODEL	ETN.259545.edz
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
MCAD MODEL	DA-CD-nzm1_xu DA-CS-nzm1_xu
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	Is 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	Is the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
ELECTRIC CONNECTION TYPE	Screw connection
FITTED WITH:	Two early-make auxiliary contacts
FRAME	NZM1
MINIMUM COMMAND TIME - MAX	15 ms
MINIMUM COMMAND TIME - MIN	10 ms
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	2
REACTION TIME	19 ms
PICK-UP POWER CONSUMPTION AT AC (UNDERVOLTAGE RELEASE)	1.5 VA
PICK-UP POWER CONSUMPTION AT DC (UNDERVOLTAGE RELEASE)	0.8 W
VOLTAGE TOLERANCE - MAX	1.1
VOLTAGE TOLERANCE - MIN	.85
RATED CONTROL SUPPLY	12 V DC

VOLTAGE	
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	0 V
SUITABLE FOR	Off-load switch
CONNECTION TYPE	With terminal block on the left-hand switch side
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
TERMINAL CAPACITY (SOLID/FLEXIBLE CONDUCTOR)	0.75 mm ² - 2.5 mm ² (1x) at shunt release with ferrule 0.75 mm ² - 2.5 mm ² (1x) for undervoltage releases, off-delayed with ferrule 0.75 mm ² - 2.5 mm ² (2x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (2x) at shunt release 0.75 mm ² - 2.5 mm ² (2x) at shunt release with ferrule 18 - 14 AWG (1x) for undervoltage releases, off-delayed 18 - 14 AWG (1x) at shunt release 18 - 14 AWG (2x) for undervoltage releases, off-delayed
TYPE	Accessory Undervoltage release Undervoltage release with early-make auxiliary contact
SPECIAL FEATURES	Undervoltage release with 2 early-make auxiliary contacts, e.g., for early-make 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 - MAX 12 V

RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN 12 V

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

RATED CONTROL VOLTAGE (RELAY CONTACTS) 12 V DC

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



Eaton Corporation plc

Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

© 2025 Eaton. All Rights Reserved.

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

