Specifications



Photo is representative

Eaton 259509

Eaton Moeller series NZM Undervoltage release, 24 V DC, for NZM2/3

General specifications	
PRODUCT NAME	Eaton Moeller series NZM Undervoltage release
CATALOG NUMBER	259509
MODEL CODE	NZM2/3-XU24DC
EAN	4015082595098
PRODUCT LENGTH/DEPTH	42 mm
PRODUCT HEIGHT	90 mm
PRODUCT WIDTH	30 mm
PRODUCT WEIGHT	0.093 kg
COMPLIANCES	IEC UL/CSA RoHS conform
CERTIFICATIONS	IEC60947 UL listed CE marking UL (File No. E140305) UL (Category Control Number DIHS) CSA (Class No. 1437-01) CSA (File No. 22086) CSA certified UL489 CSA-C22.2 No. 5-09

Delivery program

FRAME	NZM2/3
SPECIAL FEATURES	• Non-delayed disconnection of NZM circuit-breaker or N switch-disconnector when the control voltage sinks below 35 – 70% US. • For use with emergency-stop devices in connection with an emergency-stop button. • When the under-voltage trip is switched off, accidental contact with the circuit breaker’s primary contacts is prevented when switched on. • Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.
SUITABLE FOR	Off-load switch
TYPE	• Accessory • Undervoltage release
USED WITH	NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)

Design verification as per IEC/EN 61439

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 ASSEMBLIES	Does not apply, since the entire switchgear needs to 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.

Technical data - electrical

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
ELECTRIC CONNECTION TYPE	Screw connection
MINIMUM COMMAND TIME - MAX	15 ms
MINIMUM COMMAND TIME - MIN	10 ms
PICK-UP POWER CONSUMPTION AT AC (UNDERVOLTAGE RELEASE)	1.5 VA
PICK-UP POWER CONSUMPTION AT DC (UNDERVOLTAGE RELEASE)	0.8 W
POWER CONSUMPTION	1.5 VA (AC) 0.8 W (DC)
RATED CONTROL SUPPLY VOLTAGE	24 V DC
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	24 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	24 V
RATED CONTROL VOLTAGE (RELAY CONTACTS)	24 V DC
REACTION TIME	19 ms
VOLTAGE TOLERANCE - MAX	1.1
VOLTAGE TOLERANCE - MIN	0.85
VOLTAGE TYPE	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	• Non-delayed disconnection of NZM circuit-breaker or N switch-disconnector when the control voltage sinks below 35 – 70% US. • For use with emergency-stop devices in connection with an emergency-stop button. • When the under-voltage trip is switched off, accidental contact with the circuit breaker’s primary contacts is prevented when switched on. • Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.

Technical data - mechanical - terminals

TERMINAL CAPACITY (SOLID/FLEXIBLE CONDUCTOR)	0.75 mm² - 2.5 mm² (2x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (1x) for undervoltage releases, off-delayed 0.75 mm² - 2.5 mm² (2x) at shunt release with ferrule 18 - 14 AWG (2x) for undervoltage releases, off-delayed 0.75 mm² - 2.5 mm² (1x) at shunt release with ferrule 18 - 14 AWG (2x) at shunt release 18 - 14 AWG (1x) at shunt release 0.75 mm² - 2.5 mm² (1x) for undervoltage releases, off-delayed with ferrule

Resources

BROCHURES	eaton-digital-nzm-brochure-br013003en-en-us.pdf eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf
CATALOGUES	eaton-digital-nzm-catalog-ca013003en-en-us.pdf
ECAD MODEL	ETN.NZM2_3-XU24DC
INSTALLATION INSTRUCTIONS	eaton-circuit-breaker-voltage-release-nzm2-3-il012141zu.pdf
INSTALLATION VIDEOS	Introduction of the new digital circuit breaker NZM The new digital NZM Range
MCAD MODEL	eaton-int-tripping-acc-mcad-drawings-nzm2-3-xuv.dwg eaton-int-tripping-acc-mcad-3d-models-nzm2-3-xuv.stp
TECHNICAL DATA SHEETS	eaton-nzm-technical-information-sheet

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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