

Specifications



Photo is representative

Eaton 259450

Eaton Moeller series NZM Undervoltage release, 12 V DC, for NZM1

General specifications

PRODUCT NAME	Eaton Moeller series NZM Undervoltage release
CATALOG NUMBER	259450
MODEL CODE	NZM1-XU12DC
EAN	4015082594503
PRODUCT LENGTH/DEPTH	37 mm
PRODUCT HEIGHT	66 mm
PRODUCT WIDTH	32 mm
PRODUCT WEIGHT	0.044 kg
COMPLIANCES	UL/CSA IEC RoHS conform
CERTIFICATIONS	IEC60947 UL listed CSA-C22.2 No. 5-09 CSA (Class No. 1437-01) UL489 CSA (File No. 22086) CE marking UL (File No. E140305) UL (Category Control Number DIHS) CSA certified



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-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-release-nzm-mccb-dimensions.eps eaton-circuit-breaker-undervoltage-nzm-mccb-3d-drawing-004.eps
ECAD MODEL	ETN.259450.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-CS-nzm1_xu DA-CD-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
FRAME	NZM1
MINIMUM COMMAND TIME - MAX	15 ms
MINIMUM COMMAND TIME - MIN	10 ms
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	0
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 VOLTAGE	12 V DC
RATED CONTROL SUPPLY	0 V

VOLTAGE (US) AT AC, 50 HZ - MAX	
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	$0.7 \times U_s$
DROP-OUT VOLTAGE OF UNDERVOLTAGE RELEASE AC/DC - MIN	$0.35 \times U_s$
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) at shunt release 18 - 14 AWG (1x) for undervoltage releases, off-delayed 18 - 14 AWG (2x) for undervoltage releases, off-delayed 0.75 mm² - 2.5 mm² (2x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (2x) at shunt release 0.75 mm² - 2.5 mm² (1x) for undervoltage releases, off-delayed with ferrule
TYPE	Accessory Undervoltage release
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.

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:



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