

Specifications

Eaton 189780

Eaton Moeller series NZM Undervoltage release for NZM2/3, 1 early-make auxiliary contact, 2NO, 18DC, Push-in terminals



Photo is representative



General specifications

PRODUCT NAME	Eaton Moeller series NZM Undervoltage release
CATALOG NUMBER	189780
MODEL CODE	NZM2/3-XUHIV18DC-PI
EAN	4015081877751
PRODUCT LENGTH/DEPTH	115 mm
PRODUCT HEIGHT	65 mm
PRODUCT WIDTH	75 mm
PRODUCT WEIGHT	0.08 kg
COMPLIANCES	UL/CSA IEC RoHS conform

Delivery programme

FITTED WITH: Early-make auxiliary contact

SPECIAL FEATURES

- For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications.
- Instantaneous shut-off of the NZM circuit breaker when the control voltage drops 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.
- Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4).

SUITABLE FOR Motor safety switch
Off-load switch

TYPE Undervoltage release with early-make auxiliary contact

USED WITH NZM2(-4), N(S)2(-4)
NZM3(-4), N(S)3(-4)

Design verification to 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

Does not apply, since the

AGAINST ELECTRIC SHOCK	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

ELECTRIC CONNECTION TYPE	Screw connection
RATED CONTROL SUPPLY VOLTAGE	18 V DC
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	18 V
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	18 V
VOLTAGE TYPE	AC

Technical data - mechanical

CONNECTION TYPE	With push in terminal
NUMBER OF CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	1

SPECIAL FEATURES

- For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications.
- Instantaneous shut-off of the NZM circuit breaker when the control voltage drops 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.
- Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4).
-

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
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-xua.dwg
	eaton-int-tripping-acc-mcad-3d-models-nzm2-3-xua.stp
TECHNICAL DATA SHEETS	eaton-nzm-technical-information-sheet
WIRING DIAGRAMS	eaton-circuit-breaker-nzm-mccb-wiring-diagram.eps

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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

© 2026 Eaton. All Rights Reserved.

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

