

Specifications



Photo is representative



Eaton 189724

Eaton Moeller series NZM Undervoltage release for NZM2/3, configurable relays, 2NO, 24AC, Push-in terminals

General specifications

PRODUCT NAME	Eaton Moeller series NZM Undervoltage release
CATALOG NUMBER	189724
MODEL CODE	NZM2/3-XU2A24AC
EAN	4015081877195
PRODUCT LENGTH/DEPTH	115 mm
PRODUCT HEIGHT	65 mm
PRODUCT WIDTH	75 mm
PRODUCT WEIGHT	0.08 kg
COMPLIANCES	IEC UL/CSA RoHS conform
CERTIFICATIONS	UL (Category Control Number DIHS) UL489 UL (File No. E140305) UL listed CSA (File No. 22086) CE marking IEC60947 CSA certified CSA (Class No. 1437-01) CSA-C22.2 No. 5-09

Delivery programme

FRAME	NZM2/3
SPECIAL FEATURES	• 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 • For signaling commands or different states of the circuit-breaker • Two relays per unit • The activation criteria can be configured in the trip unit • Configuration via communication, circuit breaker display, front USB port and Eaton Power Xpert Protection Manager • When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on • Only for use with circuit-breakers with electronic trips
SUITABLE FOR	Motor safety switch Off-load switch
TYPE	Undervoltage release with two relays
USED WITH	PXR20(25) NZM2(-4)-..X... PXR20(25) NZM3(-4)-..X...

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

**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

**OVERVOLTAGE
CATEGORY** II

**PICK-UP POWER
CONSUMPTION AT AC
(UNDervOLTAGE
RELEASE)** 1.5 VA

**PICK-UP POWER
CONSUMPTION AT DC
(UNDervOLTAGE
RELEASE)** 0.8 W

POLLUTION DEGREE 2

POWER CONSUMPTION 0.8 W (DC)
1.5 VA (AC)

**RATED CONTROL SUPPLY
VOLTAGE (US) AT AC, 50
HZ - MAX** 24 V

**RATED CONTROL SUPPLY
VOLTAGE (US) AT AC, 50
HZ - MIN** 24 V

**RATED CONTROL SUPPLY
VOLTAGE (US) AT AC, 60
HZ - MAX** 24 V

**RATED CONTROL SUPPLY
VOLTAGE (US) AT AC, 60
HZ - MIN** 24 V

**RATED CONTROL
VOLTAGE (RELAY
CONTACTS)** 24 V AC
240 V AC
24 V DC

**RATED IMPULSE
WITHSTAND VOLTAGE
(UIMP)** 4 kV AC

**RATED INSULATION
VOLTAGE (UI)** 250 V

**RATED OPERATIONAL
CURRENT** 1 A (110 V AC-1, relay
contacts)
1 A (24 V AC-1, relay
contacts)
1 A (230 V AC-1, relay
contacts)

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)** 2

NUMBER OF RELAYS 2

SPECIAL FEATURES

- 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
- For signaling commands or different states of the circuit-breaker
- Two relays per unit
- The activation criteria can be configured in the trip unit
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- Only for use with circuit-breakers with electronic trips

STRIP LENGTH 8 mm (relay contact connection)

	1 A (24 V DC-1, relay contacts)
REACTION TIME	19 ms
SWITCHING CAPACITY (REFERENCE VALUE) - MIN	0.1 mA / 0.1 VDC
VOLTAGE TOLERANCE - MAX	1.1
VOLTAGE TOLERANCE - MIN	0.85
VOLTAGE TYPE	AC

Technical data - mechanical - terminals

TERMINAL CAPACITY (SOLID CABLE)	0.2 mm ² - 1.5 mm ² (1x) for undervoltage release 0.2 mm ² - 1.5 mm ² (1x) at shunt release
TERMINAL CAPACITY (STRANDED CABLE)	0.25 mm ² - 1.5 mm ² (1x) for undervoltage release 24 - 16 AWG (1x) for undervoltage release 0.25 mm ² - 0.75 mm ² (1x) for undervoltage release 0.25 mm ² - 1.5 mm ² (1x) at shunt release 24 - 16 AWG (1x) at shunt release 0.25 mm ² - 0.75 mm ² (1x) for undervoltage release with uninsulated end sleeve in accordance with DIN46228 / 1 0.25 mm ² - 1.5 mm ² (1x) for undervoltage release with insulated end sleeve in accordance with DIN46224 / 4

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	The new digital NZM Range Introduction of the new digital circuit breaker NZM
TECHNICAL DATA SHEETS	eaton-nzm-technical-information-sheet
WIRING DIAGRAMS	eaton-circuit-breaker-symbol-nzm-mccb-wiring-diagram.eps eaton-circuit-breaker-nzm-mccb-wiring-diagram-002.eps

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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