Specifications

Eaton 189724

Catalog Number: 189724

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



General specifications

Product Name	**Catalog Number**
Eaton Moeller series NZM release	189724
EAN	**Product Length/Depth**
4015081877195	115 mm
Product Height	**Product Width**
65 mm	75 mm
Product Weight	**Compliances**
0.08 kg	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

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Product specifications

Used with

PXR20(25) NZM2(-4)-..X…
PXR20(25) NZM3(-4)-..X…

Type

Accessory Undervoltage release Undervoltage release with two relays

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 signalizing 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 Under-voltage trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, under-voltage trip NZM...-XU... or shunt trip NZM...-XA Push-in clamp relay contacts for control wiring Relays can be used for controlling remote operator with Us=208-204 V AC Cannot be used with the PXR10 NZM-AX electronic trip

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.

Resources

Brochures

eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf

eaton-digital-nzm-brochure-br013003en-en-us.pdf

Catalogs

eaton-digital-nzm-catalog-ca013003en-en-us.pdf

Declarations of conformity

DA-DC-03_NZM2

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

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.

Electric connection type

Screw connection

Frame

NZM2/3

Pollution degree

2

Minimum command time - max

15 ms

Minimum command time - min

10 ms

Number of contacts (normally open contacts)

2

Number of relays

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 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 insulation voltage (Ui)

250 V

Strip length

8 mm (relay contact connection)

Switching capacity (reference value) - min

0.1 mA / 0.1 VDC

Rated impulse withstand voltage (Uimp)

4 kV AC

Suitable for

Motor safety switch

Off-load switch

Connection type

With push in terminal

Voltage type

AC

Drop-out voltage of undervoltage release AC/DC - max

0.7 x Us

Overvoltage category

II

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)

1 A (24 V DC-1, relay contacts)

Drop-out voltage of undervoltage release AC/DC - min

0.35 x Us

Power consumption

0.8 W (sealing DC)

1.5 VA (sealing AC)

Rated control supply voltage (Us) at DC - max

0 V

Rated control supply voltage (Us) at DC - min

0 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

Terminal capacity (stranded cable)

0.25 mm² - 1.5 mm² (1x) for undervoltage release

24 - 16 AWG (1x) for undervoltage release

0.25 mm² - 0.75 mm² (1x) for undervoltage release

0.25 mm² - 1.5 mm² (1x) at shunt release

24 - 16 AWG (1x) at shunt release

0.25 mm² - 0.75 mm² (1x) for undervoltage release with uninsulated end sleeve in accordance with DIN46228 / 1

0.25 mm² - 1.5 mm² (1x) for undervoltage release with insulated end sleeve in accordance with DIN46224 / 4

Terminal capacity (solid cable)

0.2 mm² - 1.5 mm² (1x) for undervoltage release

0.2 mm² - 1.5 mm² (1x) at shunt release

Rated control voltage (relay contacts)

24 V AC

240 V AC

24 V DC

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