

Eaton 259720

Catalog Number: 259720

Eaton Moeller series NZM - Molded Case Circuit Breaker. Shunt release, 48VAC/DC, 1

General specifications



Product Name	Catalog Number
Eaton Moeller series NZM release	259720
EAN	Product Length/Depth
4015082597207	37 mm
Product Height	Product Width
66 mm	32 mm
Product Weight	Compliances
0.044 kg	UL/CSA
	IEC
	RoHS conform

Certifications

UL (File No. E140305)
CSA (File No. 22086)
CSA (Class No. 1437-01)
CE marking
UL listed
IEC60947
CSA-C22.2 No. 5-09
UL (Category Control Number DIHS)
UL489
CSA certified

Product specifications

Used with

NZM1(-4), N(S)1(-4)

Type

Accessory

Shunt release

Special features

Switches are tripped by a voltage pulse or by the application of uninterrupted voltage.

If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on.

Shunt releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.

Voltage rating

0.7 - 1.1 x Us

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-digital-nzm-brochure-br013003en-en-us.pdf](#)

[eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf](#)

Catalogs

[eaton-digital-nzm-catalog-ca013003en-en-us.pdf](#)

Declarations of conformity

[DA-DC-03_NZM1](#)

Drawings

[eaton-circuit-breaker-release-nzm-mccb-dimensions.eps](#)

[eaton-circuit-breaker-undervoltage-nzm-mccb-3d-drawing-004.eps](#)

eCAD model

[DA-CE-ETN.NZM1-XA48AC_DC](#)

Installation instructions

[eaton-circuit-breaker-nzm1-xa-xahiv-xhiv-xu-xuhiv-il01203002z.pdf](#)

Installation videos

[Introduction of the new digital circuit breaker NZM](#)

[The new digital NZM Range](#)

Technical data sheets

[eaton-nzm-technical-information-sheet](#)

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

NZM1

Frequency rating

50 Hz / 60 Hz / 200 Hz / 400 Hz, DC (shunt release)

Minimum command time - max

15 ms

Minimum command time - min

10 ms

Number of contacts (normally open contacts)

0

Reaction time

20 ms

Pick-up power consumption (shunt release)

2.5 VA/W

Rated control supply voltage

48 V AC/DC

Rated control supply voltage (Us) at AC, 50 Hz - max

48 V

Rated control supply voltage (Us) at AC, 50 Hz - min

48 V

Rated control supply voltage (Us) at AC, 60 Hz - max

48 V

Rated control supply voltage (Us) at AC, 60 Hz - min

48 V

Suitable for

Off-load switch

Connection type

With terminal block on the left-hand switch side

With 3 m connection cable instead of screw termination

Voltage type

AC/DC

Terminal capacity (solid/flexible conductor)

18 - 14 AWG (2x) for undervoltage releases, off-delayed

18 - 14 AWG (1x) for undervoltage releases, off-delayed

18 - 14 AWG (1x) at shunt release

0.75 mm² - 2.5 mm² (1x) at shunt release with ferrule

0.75 mm² - 2.5 mm² (1x) for undervoltage releases, off-delayed
with ferrule

0.75 mm² - 2.5 mm² (2x) at shunt release with ferrule

0.75 mm² - 2.5 mm² (2x) for undervoltage releases, off-delayed
with ferrule
18 - 14 AWG (2x) at shunt release

Rated control supply voltage (Us) at DC - max
48 V

Rated control supply voltage (Us) at DC - min
48 V

Voltage rating at AC (x Us) - max
1.1

Voltage rating at AC (x Us) - min
.7

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

Time on duty - max
∞

Rated control voltage (relay contacts)
48 V AC
48 V DC



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