

Eaton 259503

Catalog Number: 259503

Eaton Moeller series NZM - Molded Case Circuit Breaker.
Undervoltage release, 480-525VAC, 2/3



General specifications

Product Name	Catalog Number
Eaton Moeller series NZM release	259503
EAN	Product Length/Depth
4015082595036	42 mm
Product Height	Product Width
90 mm	30 mm
Product Weight	Compliances
0.064 kg	IEC
	UL/CSA
	RoHS conform

Certifications

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

Product specifications

Used with

NZM3(-4), N(S)3(-4)

NZM2(-4), N(S)2(-4)

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.

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.

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_NZM2](#)

eCAD model

[DA-CE-ETN.NZM2_3-XU480-525AC](#)

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](#)

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

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

480 - 525 V 50/60 Hz

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

525 V

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

480 V

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

525 V

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

480 V

Suitable for

Off-load switch

Connection type

With bolt connection

Voltage type

AC

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

Terminal capacity (solid/flexible conductor)

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

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

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

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

18 - 14 AWG (1x) at shunt release
18 - 14 AWG (2x) at shunt release
18 - 14 AWG (2x) for undervoltage releases, off-delayed

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

Rated control voltage (relay contacts)

480 V AC
525 V AC



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