Eaton 266022

Catalog Number: 266022

Eaton Moeller series NZM - Molded Case Circuit Breaker. Switchdisconnector 4p, 630A, 3



Photo is representative

General specifications

Product Name Eaton Moeller series NZM switchdisconnector

EAN 4015082660222

Product Height 275 mm

Product Weight 6.23 kg

Certifications IEC IEC/EN 60947 Catalog Number 266022

Model Code PN3-4-630

Product Length/Depth 159 mm

Product Width 185 mm

Compliances RoHS conform



defaultTaxonomyAttributeLabel

Туре

Switch-disconnector

Special features

Main switch characteristics including positive drive to IEC/EN 60204 and VDE 0113. Isolating characteristics to IEC/EN 60947-3 and VDE 0660. Busbar tag shroud to VDE 0160 Part 100. Rated current = rated uninterrupted current: 630 A

Application

Use in unearthed supply systems at 690 V

Amperage Rating 630 A

Voltage rating 690 V - 690 V

Circuit breaker frame type PN4

Features

Version as emergency stop installation Version as main switch Version as maintenance-/service switch

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.

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

Certification reports DA-DC-03_PN3

DA-DC-03_N3

Drawings eaton-circuit-breaker-nzm-mccb-dimensions-021.eps eaton-circuit-breaker-switch-nzm-mccb-dimensions-016.eps

eCAD model DA-CE-ETN.PN3-4-630

Installation instructions IL01208009Z

Installation videos Introduction of the new digital circuit breaker NZM The new digital NZM Range

mCAD model DA-CD-nzm3_4p

DA-CS-nzm3_4p

Technical data sheets eaton-nzm-technical-information-sheet

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 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.

Pollution degree

3

Mounting Method

Fixed Distribution board installation Ground mounting Intermediate mounting Built-in device fixed built-in technique

Climatic proofing

Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30

Equipment heat dissipation, current-dependent 107.16 W

Isolation

500 V AC (between auxiliary contacts and main contacts) 300 V AC (between the auxiliary contacts)

Rated short-time withstand current (Icw) 12 kA

Degree of protection

IP20 (basic protection type, in the area of the HMI devices) Other

Direction of incoming supply

As required

Electrical connection type of main circuit Screw connection

Ambient operating temperature - max 70 °C

Ambient operating temperature - min -25 °C

Ambient storage temperature - max 70 °C

Ambient storage temperature - min 40 °C

Number of auxiliary contacts (change-over contacts)

0

Number of auxiliary contacts (normally closed contacts)

0

Number of auxiliary contacts (normally open contacts)

0

Protection against direct contact

Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110

Rated insulation voltage (Ui)

1000 V

Rated operating frequency

50 Hz

Rated operating power at AC-23, 400 V 315 kW

Rated operating power at AC-3, 400 V 0 kW

Switch positions

I, 0

Lifespan, mechanical

15000 operations

Overvoltage category

III

Rated operational current

630 A (415 V AC-22A, making and breaking capacity)
500 A (415 V AC-23A, making and breaking capacity)
630 A (690 V AC-22A, making and breaking capacity)
500 A (690 V AC-23A, making and breaking capacity)

Degree of protection (IP), front side

IP40 (with insulating surround) IP66 (with door coupling rotary handle) IP20

Degree of protection (terminations)

IP10 (tunnel terminal) IP00 (terminations, phase isolator and band terminal)

Number of poles

Four-pole

Terminal capacity (copper strip)

Max. 8 segments of 24 mm x 1 mm (2x) at box terminal Max. 10 segments of 32 mm x 1 mm + 5 segments of 32 mm x 1 mm at rear-side connection (punched)

10 segments of 50 mm x 1 mm (2x) at rear-side width extension Max. 10 segments of 24 mm x 1 mm + 5 segments of 24 mm x 1 mm Min. 6 segments of 16 mm x 0.8 mm at rear-side connection (punched) Min. 6 segments of 16 mm x 0.8 mm at box terminal

Handle color

Black

Lifespan, electrical

3000 operations at 415 V AC-3 2000 operations at 690 V AC-3 3000 operations at 690 V AC-1 3000 operations at 400 V AC-3 3000 operations at 400 V AC-1 3000 operations at 415 V AC-1

Functions

Disconnectors/main switches Interlockable

Shock resistance 20 g (half-sinusoidal shock 20 ms)

Number of switches

1

Rated conditional short-circuit current (lq) 0 kA

Rated conditional short-circuit current with back-up fuse 80 kA at 690 V PN3(N3)-400...630: 630 AgGgL 100 kA at 400/415 V

Rated conditional short-circuit current with downstream fuse

PN3(N3)-400...630: 630 AgGgL 100 kA at 400/415 V 80 kA at 690 V

Rated operating voltage (Ue) at AC - max 690 V

Rated operational current for specified heat dissipation (In) 630 A

Rated permanent current at AC-21, 400 V 0 A

Rated permanent current at AC-23, 400 V 0 A

Rated short-time withstand current (t = 0.3 s)

12 kA

Rated short-time withstand current (t = 1 s)

12 kA

Switching power at 400 V

0 kW

Handle type

Rocker lever

Number of operations per hour - max

60

Rated short-circuit making capacity Icm at 690 V, 50/60 Hz 25 kA

Rated impulse withstand voltage (Uimp) at auxiliary contacts 6000 V

Rated impulse withstand voltage (Uimp) at main contacts 8000 V

Standard terminals

Screw terminal

Optional terminals Box terminal. Connection on rear. Tunnel terminal

Short-circuit protective device fuses - max 630 A gL

Terminal capacity (copper busbar)

Max. 10 mm x 50 mm (2x) at rear-side width extension Max. 30 mm x 10 mm + 30 mm x 5 mm direct at switch rear-side connection Min. 20 mm x 5 mm direct at switch rear-side connection M10 at rear-side screw connection

Terminal capacity (copper solid conductor/cable)

16 mm² (1x) direct at switch rear-side connection
300 mm² (2x) at rear-side width extension
16 mm² (2x) at box terminal
16 mm² (2x) direct at switch rear-side connection

Terminal capacity (aluminum solid conductor/cable)

10 mm² - 16 mm² (2x) direct at switch rear-side connection
16 mm² (1x) at tunnel terminal
16 mm² (1x) direct at switch rear-side connection

Terminal capacity (copper stranded conductor/cable)

25 mm² - 120 mm² (2x) direct at switch rear-side connection 50 mm² - 240 mm² (1x) at 2-hole tunnel terminal 50 mm² - 240 mm² (2x) at 2-hole tunnel terminal 35 mm² - 240 mm² (1x) at box terminal 25 mm² - 120 mm² (1x) direct at switch rear-side connection 25 mm² - 120 mm² (2x) at box terminal

25 mm² - 185 mm² (1x) at 1-hole tunnel terminal

Terminal capacity (aluminum stranded conductor/cable)

 25 mm^2 - 185 mm^2 (1x) at 1-hole tunnel terminal up to 240 mm² depending on the cable manufacturer.



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