# Eaton 266002

# Catalog Number: 266002

Eaton Moeller series NZM - Molded Case Circuit Breaker. Switch-disconnector 4p 63A BG1





Eaton Moeller series NZM switch-

disconnector

EAN

4015082660024

**Product Height** 

145 mm

**Product Weight** 

1.081 kg

Certifications

IEC/EN 60947

IEC

Catalog Number

266002

Model Code

N1-4-63

Product Length/Depth

88 mm

Product Width

120 mm

Compliances

RoHS conform



# defaultTaxonomyAttributeLabel

#### Type

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: 63 A

#### Application

Use in unearthed supply systems at 690 V

### Amperage Rating

63 A

# Voltage rating

690 V - 690 V

# Circuit breaker frame type

N1

# **Features**

Version as main switch

Version as maintenance-/service switch

Version as emergency stop installation

# 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\_N1

#### **Drawings**

eaton-circuit-breaker-switch-nzm-mccb-dimensions-014.eps

eaton-circuit-breaker-nzm-mccb-dimensions-018.eps

#### eCAD model

DA-CE-ETN.N1-4-63

#### Installation instructions

eaton-cirucit-breaker-switch-disconnector-nzmb-il01203004z.pdf

### Installation videos

Introduction of the new digital circuit breaker NZM

The new digital NZM Range

#### mCAD model

DA-CD-nzm1\_4p

DA-CS-nzml\_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, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

### Equipment heat dissipation, current-dependent

4.52 W

#### Isolation

300 V AC (between the auxiliary contacts)

500 V AC (between auxiliary contacts and main contacts)

# Rated short-time withstand current (Icw)

2 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

Frame clamp

# 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)

# Number of auxiliary contacts (normally open contacts) Protection against direct contact Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110 Rated insulation voltage (Ui) 690 V Rated operating frequency 50 Hz Rated operating power at AC-23, 400 V 30 kW Rated operating power at AC-3, 400 V 0 kW Switch positions I, +, 0 Lifespan, mechanical 20000 operations Overvoltage category Ш Rated operational current 160 A (690 V AC-22/23A, making and breaking capacity) 160 A (415 V AC-22/23A, making and breaking capacity) Degree of protection (IP), front side IP20 IP40 (with insulating surround) IP66 (with door coupling rotary handle) Degree of protection (terminations) IP00 (terminations, phase isolator and band terminal) IP10 (tunnel terminal) Number of poles Four-pole Terminal capacity (copper strip) Max. 9 segments of 9 mm x 0.8 mm at box terminal Min. 2 segments of 9 mm x 0.8 mm at box terminal Handle color

Black

Lifespan, electrical

10000 operations at 415 V AC-1 10000 operations at 400 V AC-1

7500 operations at 690 V AC-1 1000 operations at 400 V AC-23A 1000 operations at 415 V AC-23A 1000 operations at 690 V AC-23A **Functions** Voltage release optional Disconnectors/main switches Interlockable Shock resistance 20 g (half-sinusoidal shock 20 ms) Number of switches 1 Rated conditional short-circuit current (Iq) 0 kA Rated conditional short-circuit current with back-up fuse 80 kA at 690 V 100 kA at 400/415 V 63 gG/gL Rated conditional short-circuit current with downstream fuse 100 kA at 400/415 V 10 kA at 690 V 63 gG/gL Rated operating voltage (Ue) at AC - max 690 V Rated operational current for specified heat dissipation (In) 63 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) 2 kA Rated short-time withstand current (t = 1 s) 2 kA Switching power at 400 V 0 kW Handle type Rocker lever

Number of operations per hour - max

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

2.8 kA

### Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

### Rated impulse withstand voltage (Uimp) at main contacts

6000 V

#### Standard terminals

Box terminal

#### Optional terminals

Connection on rear. Screw terminal. Tunnel terminal

#### Short-circuit protective device fuses - max

125 A gL

# Terminal capacity (copper busbar)

Min. 12 mm x 5 mm direct at switch rear-side connection

M6 at rear-side screw connection

Max. 16 mm x 5 mm direct at switch rear-side connection

### Terminal capacity (copper solid conductor/cable)

10 mm<sup>2</sup> - 16 mm<sup>2</sup> (1x) direct at switch rear-side connection

6 mm<sup>2</sup> - 16 mm<sup>2</sup> (2x) at box terminal

16 mm<sup>2</sup> (1x) at tunnel terminal

10 mm<sup>2</sup> - 16 mm<sup>2</sup> (1x) at box terminal

6 mm<sup>2</sup> - 16 mm<sup>2</sup> (2x) direct at switch rear-side connection

# Terminal capacity (aluminum solid conductor/cable)

10 mm<sup>2</sup> - 16 mm<sup>2</sup> (1x) direct at switch rear-side connection

16 mm<sup>2</sup> (1x) at tunnel terminal

10 mm<sup>2</sup> - 16 mm<sup>2</sup> (2x) direct at switch rear-side connection

# Terminal capacity (copper stranded conductor/cable)

Terminal capacity hint: Up to 95 mm² can be connected

depending on the cable manufacturer 6 mm<sup>2</sup> - 25 mm<sup>2</sup> (2x) at box terminal

10 mm<sup>2</sup> - 70 mm<sup>2</sup> (1x) at box terminal

25 mm² (2x) direct at switch rear-side connection

25 mm<sup>2</sup> - 95 mm<sup>2</sup> (1x) at 1-hole tunnel terminal

25 mm<sup>2</sup> - 70 mm<sup>2</sup> (1x) direct at switch rear-side connection

# Terminal capacity (aluminum stranded conductor/cable)

25 mm<sup>2</sup> - 95 mm<sup>2</sup> (1x) at 1-hole tunnel terminal



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