Specifications

Eaton 266029

Catalog Number: 266029

Eaton Moeller series NZM - Molded Case Circuit Breaker. Switch-disconnector 4p 800A BG4



General specifications

Product Name
Eaton Moeller series NZM switch-disconnector

Catalog Number
266029

EAN
4015082660291

Product Length/Depth
401 mm

Product Height
207 mm

Product Width
280 mm

Product Weight
22.723 kg

Compliances
RoHS conform

Certifications
IEC/EN 60947
IEC

Powering Business Worldwide

Product specifications

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: 800 A

Application

Use in unearthed supply systems at 525 V

Amperage Rating

800 A

Voltage rating

690 V - 690 V

Circuit breaker frame type

N4

Features

Motor drive optional
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

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_N4

Drawings

eaton-circuit-breaker-nzm-mccb-dimensions-023.eps

eCAD model

DA-CE-ETN.N4-4-800

Installation instructions

eaton-circuit-breaker-basic-unit-bg4-il012101zu.pdf

Installation videos

The new digital NZM Range

Introduction of the new digital circuit breaker NZM

mCAD model

DA-CS-nzm4_4p

DA-CD-nzm4_4p

Technical data sheets

eaton-nzm-technical-information-sheet

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.

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

Intermediate mounting

Fixed

Distribution board installation

Ground 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

79 W

Isolation

500 V AC (between auxiliary contacts and main contacts)

300 V AC (between the auxiliary contacts)

Rated short-time withstand current (Icw)

25 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

Bolt 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 263

Rated insulation voltage (Ui)

1000 V

Rated operating frequency

50 Hz

Rated operating power at AC-23, 400 V

450 kW

Rated operating power at AC-3, 400 V

0 kW

Switch positions

I, +, 0

Lifespan, mechanical

10000 operations

Overvoltage category

III

Rated operational current

1600 A (690 V AC-22/23A, making and breaking capacity)
1600 A (415 V AC-22/23A, making and breaking capacity)

Degree of protection (IP), front side

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

Degree of protection (terminations)

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

Number of poles

Four-pole

Terminal capacity (copper strip)

10 segments of 50 mm x 1 mm (2x) at 1-hole module plate
Max. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched)
Max. 10 segments of 32 mm x 1 mm (2x) at flat conductor terminal

10 segments of 80 mm x 1 mm (2x) at rear-side width extension
Min. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched)
Min. 6 segments of 16 mm x 0.8 mm at flat conductor terminal

Handle color

Black

Lifespan, electrical

1000 operations at 690 V AC-3
2000 operations at 690 V AC-1
2000 operations at 415 V AC-3
3000 operations at 415 V AC-1
2000 operations at 400 V AC-3
3000 operations at 400 V AC-1

Functions

Disconnectors/main switches
Interlockable
Voltage release optional

Shock resistance

15 g (half-sinusoidal shock 11 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
N4-630…1600: 2 x 800 AgGgL
100 kA at 400/415 V

Rated conditional short-circuit current with downstream fuse

80 kA at 690 V
100 kA at 400/415 V
N4-630…1600: 2 x 800 AgGgL

Rated operating voltage (Ue) at AC - max

690 V

Rated operational current for specified heat dissipation (In)

800 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)

25 kA

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

25 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

53 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

Connection on rear. Strip terminal. Tunnel terminal

Short-circuit protective device fuses - max

1600 A gL

Terminal capacity (copper busbar)

50 mm x 10 mm (2x) at rear-side 2-hole module plate
Min. 25 mm x 5 mm direct at switch rear-side connection
Max. 80 mm x 10 mm (2x) at rear-side width extension
M10 at rear-side screw connection
Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate
Max. 50 mm x 10 mm (2x) direct at switch rear-side connection
Min. 60 mm x 10 mm at rear-side width extension
Min. 25 mm x 5 mm at rear-side 1-hole module plate

Terminal capacity (copper solid conductor/cable)

50 mm² - 240 mm² (4x) at 4-hole tunnel terminal
300 mm² (4x) at rear-side width extension
95 mm² - 240 mm² (6x) at rear-side width extension
185 mm² - 240 mm² (1x) at rear-side 1-hole module plate
50 mm² (4x) at rear-side 2-hole module plate
35 mm² - 185 mm² (4x) at rear-side 2-hole module plate
70 mm² - 185 mm² (2x) at rear-side 1-hole module plate

Terminal capacity (aluminum solid conductor/cable)

240 mm² (2x) at rear-side width extension

70 mm² - 240 mm² (6x) at rear-side width extension

Terminal capacity (copper stranded conductor/cable)

120 mm² - 185 mm² (1x) direct at switch rear-side connection

50 mm² - 185 mm² (4x) direct at switch rear-side connection

Terminal capacity (aluminum stranded conductor/cable)

50 mm² - 240 mm² (4x) at 4-hole tunnel terminal

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