Product specifications

Eaton 127733

Catalog Number: 127733

Eaton Moeller series NZM - Molded Case Circuit Breaker. Switch-disconnector 4p 200A 1000VDC

Photo is representative

General specifications

Product Name
Eaton Moeller series NZM switch-disconnector

Catalog Number
127733

Model Code
N2-4-200-S1-DC

EAN
4015081251438

Product Length/Depth
149 mm

Product Height
184 mm

Product Width
140 mm

Product Weight
2.878 kg

Compliances
RoHS conform

Certifications
IEC

Powering Business Worldwide

defaultTaxonomyAttributeLabel

Type

DC switch-disconnector Switch-disconnector

Special features

IEC/EN 60947-3 CCC China Compulsory Certificate Main switch characteristics including positive drive to IEC/EN 60204 and VDE 0113. Isolating characteristics to IEC/EN 60947-3 and VDE 0660. N switch-disconnectors can be combined with NZM...-XU, NZM...-XA shunt releases and auxiliary contacts as well as with NZM...-XR... remote operator. For DC switching, all 4 contacts must be connected in series. Refer to the information on jumper kit accessories. Supplied as standard: Screw connection box terminal optional. When working with ungrounded systems (e.g., IT), the installation must ensure that a double ground fault will be impossible. Switch can not be combined with plug-in/withdrawable units and/or connection on rear. N4-4-...-S15-DC feeder unit and outgoer from the bottom only. Lifespan, mechanical: of which max. 50 % trip by shunt/undervoltage release Rated current = rated uninterrupted current: 200 A Values for rated uninterrupted current at 65 °C include jumpers.

Application

Open areas Utility buildings

Amperage Rating

200 A

Voltage rating

1000 V - 1000 V

Circuit breaker frame type

N2

Features

Remote operation with shunt releases / remote operator
Version as emergency stop installation
Version as main switch
Version as maintenance-/service switch
Motor drive optional

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.

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

Certification reports

DA-DC-03_N2

Drawings

eaton-circuit-breaker-switch-nzm-mccb-dimensions-017.eps

eaton-circuit-breaker-nzm-mccb-dimensions-035.eps

eaton-circuit-breaker-terminals-nzm-switch-disconnector-3d-drawing-003.eps

eaton-circuit-breaker-cable-nzm-mccb-3d-drawing-002.eps

eaton-circuit-breaker-terminals-nzm-switch-disconnector-3d-drawing.eps

eaton-circuit-breaker-terminals-nzm-switch-disconnector-3d-drawing-002.eps

eaton-circuit-breaker-nzm-switch-disconnector-3d-drawing.eps

eaton-circuit-breaker-nzm-switch-disconnector-3d-drawing-002.eps

eaton-circuit-breaker-nzm-switch-disconnector-3d-drawing-003.eps

eCAD model

DA-CE-ETN.N2-4-200-S1-DC

Installation instructions

eaton-circuit-breaker-n2-4-s1-15-dc-il01207001z.pdf

Installation videos

The new digital NZM Range

Introduction of the new digital circuit breaker NZM

mCAD model

DA-CS-nzm2_4p

DA-CD-nzm2_4p

Technical data sheets

eaton-nzm-technical-information-sheet

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.

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

Ground mounting

Built-in device fixed built-in technique

Distribution board installation

Fixed

Intermediate mounting

Equipment heat dissipation, current-dependent

42 W

Utilization category

DC-22 A

Rated short-time withstand current (Icw)

3.6 kA

Degree of protection

IP20

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

Current rating (Iu) at 40°C with terminal jumpers

200 A

Current rating (Iu) at 65°C with terminal jumpers

200 A

Number of auxiliary contacts (change-over contacts)

0

Number of auxiliary contacts (normally closed contacts)

0

Number of auxiliary contacts (normally open contacts)

0

Rated insulation voltage (Ui)

1250 V

Rated operating power at AC-23, 400 V

0 kW

Rated operating power at AC-3, 400 V

0 kW

Switch positions

I, +, 0

Lifespan, mechanical

20000 operations

Overvoltage category

III

Rated operational current

200 A (DC 22-A)

Degree of protection (IP), front side

IP20

Number of poles

Four-pole

Terminal capacity (copper strip)

Min. 2 segments of 9 mm x 0.8 mm at box terminal
Max. 8 segments of 15.5 mm x 0.8 mm (2x) at box terminal
Min. 2 segements of 16 mm x 0.8 mm at rear-side connection (punched)
Max. 10 segments of 24 mm x 0.8 mm at rear-side connection (punched)
Max. 10 segments of 16 mm x 0.8 mm at box terminal

Handle color

Black

Functions

Voltage release optional
Photovoltaic applications
Interlockable
Disconnectors/main switches

Number of switches

1

Rated conditional short-circuit current (Iq)

0 kA

Rated conditional short-circuit current with back-up fuse

200 AgR

15 kA at 1000 V

Rated operating voltage (Ue) at AC - max

0 V

Rated operational current for specified heat dissipation (In)

200 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 = 1 s)

3.6 kA

Switching power at 400 V

0 kW

Handle type

Rocker lever

Number of operations per hour - max

120

Standard terminals

Screw terminal

Short-circuit protective device fuses - max

200 A gR

Terminal capacity (copper busbar)

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

Max. 24 mm x 8 mm direct at switch rear-side connection

M8 at rear-side screw connection

Terminal capacity (copper solid conductor/cable)

4 mm² - 16 mm² (2x) at box terminal

4 mm² - 16 mm² (2x) direct at switch rear-side connection

16 mm² (1x) at tunnel terminal

4 mm² - 16 mm² (1x) at box terminal

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

Terminal capacity (aluminum solid conductor/cable)

16 mm² (1x) at tunnel terminal

Terminal capacity (copper stranded conductor/cable)

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

25 mm² - 70 mm² (2x) at box terminal

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

25 mm² - 70 mm² (2x) direct at switch rear-side connection

25 mm² - 185 mm² (1x) at box terminal

Terminal capacity (aluminum stranded conductor/cable)

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

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