Eaton 265770

Catalog Number: 265770

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 1000A, N, frame 4, VE1000

General specifications

Product Name

Catalog Number

Eaton Moeller series NZM molded case

265770

circuit breaker electronic

Model Code

NZMN4-VE1000

EAN

4015082657703

Product Length/Depth

401 mm

Product Height

Product Weight

Product Width 210 mm

207 mm

Compliances

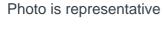
19.2 kg

RoHS conform

Certifications

IEC

IEC/EN 60947





defaultTaxonomyAttributeLabel

Type

Circuit breaker

Special features

Maximum back-up fuse, if

the expected short-circuit

currents at the installation

location exceed the

switching capacity of the

circuit breaker (Rated short-

circuit breaking capacity Icn)

R.m.s. value measurement

and "thermal memory"

Adjustable time delay setting

to overcome current peaks tr

at 6 x Ir also infinity (without

overload releases)

Adjustable delay time tsd

i2t constant function:

switchable

Rated current = rated

uninterrupted current: 1000

Α

Application

Use in unearthed supply systems at 525 V

Amperage Rating

1000 A

Voltage rating

690 V - 690 V

Circuit breaker frame type

NZM4

Features

Motor drive optional

Protection unit

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-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_N4

Characteristic curve

eaton-circuit-breaker-nzm-mccb-characteristic-curve-049.eps

eaton-circuit-breaker-nzm-mccb-characteristic-curve-048.eps

Drawings

eaton-circuit-breaker-nzm-mccb-dimensions-022.eps

eCAD model

DA-CE-ETN.NZMN4-VE1000

ETN.265770.edz

Installation instructions

IL01210010Z

Installation videos

The new digital NZM Range

Introduction of the new digital circuit breaker NZM

mCAD model

DA-CD-nzm4_3p

DA-CS-nzm4_3p

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

Built-in device fixed built-in technique

Fixed

Climatic proofing

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

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

Equipment heat dissipation, current-dependent

165 W

Utilization category

B (IEC/EN 60947-2)

Isolation

500 V AC (between auxiliary contacts and main contacts)

300 V AC (between the auxiliary contacts)

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

Degree of protection

IP20

IP20 (basic degree of protection, in the operating controls area)

Direction of incoming supply

As required

Electrical connection type of main circuit

Screw connection

Lifespan, mechanical

10000 operations

Overvoltage category

Ш

Degree of protection (IP), front side

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

Degree of protection (terminations)

IP10 (tunnel terminal)

IP00 (terminations, phase isolator and strip terminal)

Number of poles

Three-pole

Terminal capacity (copper strip)

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. 6 segments of 16 mm x 0.8 mm at flat conductor terminal 10 segments of 50 mm x 1 mm (2x) at 1-hole module plate Min. 5 segments of 25 mm x 1 mm at rear-side connection (punched)

Max. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched)

Lifespan, electrical

1000 operations at 690 V AC-3

2000 operations at 400 V AC-3

2000 operations at 415 V AC-3

3000 operations at 415 V AC-1

3000 operations at 400 V AC-1

2000 operations at 690 V AC-1

Functions

Systems, cable, selectivity and generator protection

Shock resistance

15 g (half-sinusoidal shock 11 ms)

Position of connection for main current circuit

Front side

Rated operational current for specified heat dissipation (In)

1000 A

Release system

Electronic release

Short-circuit total breaktime

< 25 ms (415 V); < 35 ms (> 415 V)

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

12 kA

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

12 kA

Short-circuit release delayed setting - max

10000 A

Short-circuit release delayed setting - min

1000 A

Short-circuit release non-delayed setting - max

12000 A

Short-circuit release non-delayed setting - min

2000 A

Terminal capacity (control cable)

0.75 mm² - 2.5 mm² (1x)

0.75 mm² - 1.5 mm² (2x)

Terminal capacity (copper busbar)

Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate

Min. 25 mm x 5 mm direct at switch rear-side connection

Min. 60 mm x 10 mm at rear-side width extension

M10 at rear-side screw connection

Max. 80 mm x 10 mm (2x) at rear-side width extension

Min. 25 mm x 5 mm at rear-side 1-hole module plate

Max. 50 mm x 10 mm (2x) direct at switch rear-side connection

50 mm x 10 mm (2x) at rear-side 2-hole module plate

Terminal capacity (copper solid conductor/cable)

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

 35 mm^2 - 185 mm^2 (4x) at rear-side 2-hole module plate

120 mm² - 300 mm² (1x) at rear-side 1-hole module plate

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

95 mm² - 300 mm² (2x) at rear-side 1-hole module plate

300 mm² (4x) at rear-side width extension 95 mm² - 185 mm² (2x) at rear-side 2-hole module plate

Terminal capacity (aluminum solid conductor/cable)

185 mm² - 240 mm² (1x) at rear-side 1-hole module plate

70 mm² - 185 mm² (2x) at rear-side 1-hole module plate

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

50 mm² (4x) at rear-side 2-hole module plate

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

Terminal capacity (copper stranded conductor/cable)

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

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

Terminal capacity (aluminum stranded conductor/cable)

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

Handle type

Rocker lever

Short delay current setting (Isd) - max

10000 A

Short delay current setting (Isd) - min

1000 A

Instantaneous current setting (li) - max

12000 A

Instantaneous current setting (Ii) - min

2000 A

Number of operations per hour - max

60

Overload current setting (Ir) - max

1000 A

Overload current setting (Ir) - min

500 A

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, $50/60~\mathrm{Hz}$

37 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 400/415 V, 50/60 Hz

37 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 440 V, 50/60 Hz

26 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 525 V, 50/60 Hz

19 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 690 V, 50/60 Hz

15 kA

Rated short-circuit making capacity Icm at 400/415 V, 50/60 Hz

105 kA

Rated short-circuit making capacity Icm at 440 V, 50/60 Hz

74 kA

Rated short-circuit making capacity Icm at 525 V, 50/60 Hz

53 kA

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

40 kA

Standard terminals

Screw terminal

Optional terminals

Connection on rear. Strip terminal. Tunnel terminal

Rated short-circuit making capacity Icm at 240 V, 50/60 Hz

105 kA

Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

Rated impulse withstand voltage (Uimp) at main contacts

8000 V

Rated insulation voltage (Ui)

1000 V AC



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