Eaton 265769

Catalog Number: 265769

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 800A, N, frame 4, VE800

General specifications

Product Name

Eaton Moeller series NZM molded case

circuit breaker electronic

Model Code

265769

NZMN4-VE800

Catalog Number

EAN

4015082657697

Product Height

207 mm

Product Weight

15.52 kg

Product Length/Depth

401 mm

Product Width

210 mm

Compliances

RoHS conform

Photo is representative

Certifications

IEC/EN 60947

IEC



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: 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

NZM4

Features

Protection unit

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-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

ETN.265769.edz

DA-CE-ETN.NZMN4-VE800

Installation instructions

IL01210010Z

Installation videos

The new digital NZM Range

Introduction of the new digital circuit breaker NZM

mCAD model

DA-CS-nzm4_3p

DA-CD-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

106 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

IP40 (with insulating surround)

IP66 (with door coupling rotary handle)

Degree of protection (terminations)

IP00 (terminations, phase isolator and strip terminal)

IP10 (tunnel terminal)

Number of poles

Three-pole

Terminal capacity (copper strip)

Min. 5 segments of 25 mm x 1 mm at rear-side connection (punched)

Max. 10 segments of 32 mm x 1 mm (2x) at flat conductor terminal

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)

Min. 6 segments of 16 mm x 0.8 mm at flat conductor terminal

10 segments of 80 mm x 1 mm (2x) at rear-side width extension

Lifespan, electrical

2000 operations at 415 V AC-3

2000 operations at 400 V AC-3

2000 operations at 690 V AC-1

3000 operations at 400 V AC-1

1000 operations at 690 V AC-3

3000 operations at 415 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)

800 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

8000 A

Short-circuit release delayed setting - min

800 A

Short-circuit release non-delayed setting - max

12000 A

Short-circuit release non-delayed setting - min

1600 A

Terminal capacity (control cable)

0.75 mm² - 2.5 mm² (1x)

0.75 mm² - 1.5 mm² (2x)

Terminal capacity (copper busbar)

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

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

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

M10 at rear-side screw connection

Terminal capacity (copper solid conductor/cable)

35 mm² - 185 mm² (4x) at rear-side 2-hole module plate

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

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

300 mm² (4x) at rear-side width extension

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

95 mm² - 300 mm² (2x) at rear-side 1-hole module plate 50 mm² - 240 mm² (4x) at 4-hole tunnel terminal Terminal capacity (aluminum solid conductor/cable) 240 mm² (2x) at rear-side width extension 50 mm² (4x) at rear-side 2-hole module plate 185 mm² - 240 mm² (1x) at rear-side 1-hole module plate 70 mm² - 240 mm² (6x) at rear-side width extension 70 mm² - 185 mm² (2x) at rear-side 1-hole module plate 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 Handle type Rocker lever Short delay current setting (Isd) - max 8000 A Short delay current setting (Isd) - min 800 A Instantaneous current setting (li) - max 9600 A Instantaneous current setting (Ii) - min 1600 A Number of operations per hour - max Overload current setting (Ir) - max 800 A Overload current setting (Ir) - min 400 A Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, 50/60 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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