Eaton 192262

Catalog Number: 192262

Eaton Moeller series NZM - Molded Case Circuit Breaker. NZM3 PXR25, class 1, 400A, 3p, Screw terminal, earth-fault protection, ARMS and zone selectivity, H, 3

General specifications



Eaton Moeller series NZM molded case 192262

circuit breaker electronic

Model Code

NZMH3-PX400-TAZ

Product Length/Depth

Catalog Number

EAN

4015081928132

275 mm

Product Height

120.5 mm

Product Width

140 mm

Product Weight

6.65 kg

Compliances

RoHS conform

Photo is representative

Certifications

IEC

IEC/EN 60947



defaultTaxonomyAttributeLabel

Type

Circuit breaker

Special features

LSIG overload protection

and delayed and non-

delayed short-circuit

protective device, earth-fault

protection

Class 1 energy

measurement, r.m.s. value

measurement, and "thermal

memory"

USB interface for

configuration and test

function with Power Xpert

Protection Manager

software

Zone selectivity ZSI

Maintenance Mode ARMS

Interface module in

equipment supplied.

Optionally communication-

capable with internal

Modbus RTU module or

CAM

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)

Rated current = rated

uninterrupted current: 400 A

Terminal capacity hint: Up to

240 mm² can be connected

depending on the cable

manufacturer.

Application

Use in unearthed supply systems at 690 V

Amperage Rating

400 A

Voltage rating

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

Characteristic curve

eaton-circuit-breaker-nzm-mccb-characteristic-curve-012.eps eaton-circuit-breaker-nzm-mccb-characteristic-curve-016.eps

Drawings

eaton-circuit-breaker-nzm-mccb-dimensions-020.eps
eaton-circuit-breaker-switch-nzm-mccb-dimensions-016.eps

Installation instructions

eaton-circuit-breaker-basic-unit-bg3-il012100zu.pdf

Installation videos

The new digital NZM Range

Introduction of the new digital circuit breaker NZM

mCAD model

DA-CD-nzm3_3p

DA-CS-nzm3_3p

Technical data sheets

eaton-nzm-technical-information-sheet

Circuit breaker frame type

NZM3

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.

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, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

Equipment heat dissipation, current-dependent

48 W

Utilization category

A (IEC/EN 60947-2)

Isolation

300 V AC (between the auxiliary contacts)

500 V AC (between auxiliary contacts and main 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) 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 15000 operations Overvoltage category Ш Degree of protection (IP), front side IP66 (with door coupling rotary handle) IP40 (with insulating surround) Degree of protection (terminations) IP00 (terminations, phase isolator and strip terminal) IP10 (tunnel terminal) Number of poles Three-pole Terminal capacity (copper strip) Max. 10 segments of 24 mm x 1 mm + 5 segments of 24 mm x 1 mm Max. 8 segments of 24 mm x 1 mm (2x) at box terminal

Min. 6 segments of 16 mm x 0.8 mm at rear-side connection

Min. 6 segments of 16 mm x 0.8 mm at box terminal

(punched)

10 segments of 50 mm x 1 mm (2x) at rear-side width extension Max. 10 segments of 32 mm x 1 mm + 5 segments of 32 mm x 1 mm at rear-side connection (punched)

Lifespan, electrical

5000 operations at 400 V AC-1 3000 operations at 690 V AC-1 5000 operations at 415 V AC-1

Functions

Earth-fault protection
ARMS maintenance mode
Integrated earth fault protection
Systems, cable, selectivity and generator protection
Zone selectivity

Earth-fault current setting (Ig) - max

400 x In

Shock resistance

20 g (half-sinusoidal shock 20 ms)

Earth-fault current setting (Ig) - min

80 x In

Position of connection for main current circuit

Front side

Rated operational current for specified heat dissipation (In)

400 A

Release system

Electronic release

Short-circuit total breaktime

< 10 ms

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

3.3 kA

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

3.3 kA

Short-circuit release delayed setting - max

4000 A

Short-circuit release delayed setting - min

320 A

Short-circuit release non-delayed setting - max

4800 A

Short-circuit release non-delayed setting - min

800 A

Terminal capacity (control cable)

0.75 mm² - 2.5 mm² (1x) 0.75 mm² - 1.5 mm² (2x)

Terminal capacity (copper busbar)

Max. 10 mm x 50 mm (2x) at rear-side width extension

Min. 20 mm x 5 mm direct at switch rear-side connection

Max. 30 mm x 10 mm + 30 mm x 5 mm direct at switch rear-side connection

M10 at rear-side screw connection

Terminal capacity (copper solid conductor/cable)

16 mm² (1x) at tunnel terminal

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

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

16 mm² (2x) at box terminal

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

Terminal capacity (aluminum solid conductor/cable)

16 mm² (1x) at tunnel terminal

Terminal capacity (copper stranded conductor/cable)

25 mm² - 120 mm² (2x) at box terminal

16 mm² - 185 mm² (1x) at 1-hole tunnel terminal

25 mm² - 240 mm² (2x) direct at switch rear-side connection

35 mm² - 240 mm² (1x) at box terminal

25 mm² - 240 mm² (1x) direct at switch rear-side connection

Terminal capacity (aluminum stranded conductor/cable)

50 mm² - 240 mm² (1x) at 2-hole tunnel terminal

50 mm² - 240 mm² (2x) at 2-hole tunnel terminal

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

Handle type

Rocker lever

Short delay current setting (Isd) - max

10 A

Short delay current setting (Isd) - min

2 A

Instantaneous current setting (li) - max

12 A

Instantaneous current setting (li) - min

2 A

Number of operations per hour - max

60

Overload current setting (Ir) - max

400 A

Overload current setting (Ir) - min 160 A Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, 50/60 Hz 150 kA Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 400/415 V, 50/60 Hz 150 kA Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 440 V, 50/60 Hz 130 kA Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 525 33 kA Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 690 V, 50/60 Hz 9 kA Rated short-circuit making capacity Icm at 400/415 V, 50/60 Hz 330 kA Rated short-circuit making capacity Icm at 440 V, 50/60 Hz 286 kA Rated short-circuit making capacity Icm at 525 V, 50/60 Hz 143 kA Rated short-circuit making capacity Icm at 690 V, 50/60 Hz 74 kA Standard terminals Screw terminal Optional terminals Box terminal. Connection on rear. Tunnel terminal Rated short-circuit making capacity Icm at 240 V, 50/60 Hz 330 kA Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

Rated impulse withstand voltage (Uimp) at main contacts

Rated insulation voltage (Ui)

690 V AC



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