# Eaton 113352

# Catalog Number: 113352

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuitbreaker, 3p, 25A, plug-in module, H, frame 2, A25-SVE

# General specifications

**Product Name** 

**EAN** 

Eaton Moeller series NZM molded case 113352

circuit breaker thermo-magnetic

Model Code

NZMH2-A25-SVE

Product Length/Depth

Catalog Number

4015081128877 180 mm

**Product Height Product Width** 

245 mm 105 mm

**Product Weight** Compliances

RoHS conform 2.777 kg

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)

Rated current = rated

uninterrupted current: 25 A

#### Application

Use in unearthed supply systems at 690 V

#### **Amperage Rating**

25 A

#### Voltage rating

690 V - 690 V

# Circuit breaker frame type

NZM2

# **Features**

Protection unit

Motor drive optional

# Accessories required

NZM2-XSVS

# 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.

#### 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

#### Characteristic curve

eaton-circuit-breaker-nzm-mccb-characteristic-curve-050.eps

eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-037. eps

eaton-circuit-breaker-let-through-current-nzm-mccb-characteristic-curve-005.eps

#### **Drawings**

eaton-circuit-breaker-switch-nzm-mccb-dimensions-017.eps
eaton-circuit-breaker-nzm-mccb-dimensions-019.eps

eaton-circuit-breaker-adapter-nzm-mccb-dimensions-002.eps

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

#### Installation instructions

IL01219023Z

#### Installation videos

Introduction of the new digital circuit breaker NZM

The new digital NZM Range

# mCAD model

DA-CD-nzm2\_xsve

DA-CS-nzm2\_xsve

# Technical data sheets

eaton-nzm-technical-information-sheet

#### 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 plug-in technique

Plug-in unit

DIN rail (top hat rail) mounting optional

# Climatic proofing

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

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

#### Equipment heat dissipation, current-dependent

7.97 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)

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

20000 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 24 mm x 0.8 mm at rear-side connection (punched)

Max. 8 segments of 24 mm x 1 mm (2x) at box terminal

Min. 2 segements of 16 mm  $\times$  0.8 mm at rear-side connection (punched)

Max. 10 segments of 16 mm x 0.8 mm at box terminal Min. 2 segments of 9 mm x 0.8 mm at box terminal

# Lifespan, electrical

10000 operations at 415 V AC-1

6500 operations at 415 V AC-3

6500 operations at 400 V AC-3

10000 operations at 400 V AC-1

7500 operations at 690 V AC-1

5000 operations at 690 V AC-3

#### **Functions**

System and cable protection

#### Shock resistance

20 g (half-sinusoidal shock 20 ms)

# Position of connection for main current circuit

Front side

# Rated operational current for specified heat dissipation (In)

25 A

# Power loss

# Release system

Thermomagnetic release

#### Short-circuit total breaktime

< 10 ms

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

1.9 kA

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

1.9 kA

#### Short-circuit release non-delayed setting - max

350 A

#### Short-circuit release non-delayed setting - min

350 A

#### Terminal capacity (control cable)

0.75 mm<sup>2</sup> - 1.5 mm<sup>2</sup> (2x)

0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (1x)

#### Terminal capacity (copper busbar)

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

M8 at rear-side screw connection

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

#### Terminal capacity (copper solid conductor/cable)

10 mm<sup>2</sup> - 16 mm<sup>2</sup> (1x) at box terminal

10 mm<sup>2</sup> - 16 mm<sup>2</sup> (1x) direct at switch rear-side connection

16 mm<sup>2</sup> (1x) at tunnel terminal

6 mm<sup>2</sup> - 16 mm<sup>2</sup> (2x) direct at switch rear-side connection

6 mm<sup>2</sup> - 16 mm<sup>2</sup> (2x) at box terminal

# Terminal capacity (aluminum solid conductor/cable)

16 mm² (1x) at tunnel terminal

# Terminal capacity (copper stranded conductor/cable)

25 mm<sup>2</sup> - 185 mm<sup>2</sup> (1x) direct at switch rear-side connection

25 mm<sup>2</sup> - 70 mm<sup>2</sup> (2x) direct at switch rear-side connection

25 mm<sup>2</sup> - 70 mm<sup>2</sup> (2x) at box terminal

25 mm<sup>2</sup> - 185 mm<sup>2</sup> (1x) at box terminal

25 mm<sup>2</sup> - 185 mm<sup>2</sup> (1x) at 1-hole tunnel terminal

#### Terminal capacity (aluminum stranded conductor/cable)

25 mm<sup>2</sup> - 185 mm<sup>2</sup> (1x) at tunnel terminal

#### Handle type

Rocker lever

#### Short delay current setting (Isd) - max

0 A

Short delay current setting (Isd) - min 0 A Instantaneous current setting (li) - max 350 A Instantaneous current setting (li) - min 350 A Number of operations per hour - max 120 Overload current setting (Ir) - max 25 A Overload current setting (Ir) - min 20 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 V, 50/60 Hz 37.5 kA Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 690 V, 50/60 Hz 5 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 105 kA Rated short-circuit making capacity Icm at 690 V, 50/60 Hz 40 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

8000 V

Rated insulation voltage (Ui)

1000 V AC



Eaton Corporation plc Eaton House 30 Pembroke Road Dublin 4, Ireland Eaton.com

Reserved.

Eaton is a registered trademark.

All other trademarks are © 2024 Eaton. All Rights property of their respective owners.



Eaton.com/socialmedia