

# Eaton 113359

Catalog Number: 113359

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 63A, plug-in module, H2-M63-SVE



Photo is representative

## General specifications

Product Name	Catalog Number
Eaton Moeller series NZM molded case circuit breaker thermo-magnetic	113359
Model Code	NZMH2-M63-SVE
EAN	Product Length/Depth
4015081128945	180 mm
Product Height	Product Width
245 mm	105 mm
Product Weight	Compliances
2.798 kg	RoHS conform
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  $I_{cn}$ )

Rated current = rated uninterrupted current: 63 A

Tripping class 10 A

IEC/EN 60947-4-1, IEC/EN 60947-2

The circuit-breaker fulfills all requirements for AC-3 switching category.

### Application

Use in unearthed supply systems at 690 V

### Amperage Rating

63 A

### Voltage rating

690 V - 690 V

### Circuit breaker frame type

NZM2

### 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

## 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-characteristic-power-defense-mccb-characteristic-curve-037.eps](#)

[eaton-circuit-breaker-nzm-mccb-characteristic-curve-052.eps](#)

[eaton-circuit-breaker-let-through-current-nzm-mccb-characteristic-curve-005.eps](#)

### Drawings

[eaton-circuit-breaker-nzm-mccb-dimensions-019.eps](#)

[eaton-circuit-breaker-switch-nzm-mccb-dimensions-017.eps](#)

[eaton-circuit-breaker-adapter-nzm-mccb-dimensions-002.eps](#)

[eaton-circuit-breaker-switch-nzm-mccb-3d-drawing.eps](#)

[eaton-general-ie-ready-dilm-contactor-standards.eps](#)

### Installation instructions

[IL01219023Z](#)

[eaton-circuit-breakers-nzm2-basic-device-bg2-instruction-leaflet-il01206006z.pdf](#)

### Installation videos

[Introduction of the new digital circuit breaker NZM](#)

[The new digital NZM Range](#)

### mCAD model

[DA-CS-nzm2\\_xsve](#)

[DA-CD-nzm2\\_xsve](#)

### Technical data sheets

[eaton-nzm-technical-information-sheet](#)

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.

Fitted with:

Thermal protection

Pollution degree

3

Mounting Method

Plug-in unit

Built-in device plug-in technique

Climatic proofing

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

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

Equipment heat dissipation, current-dependent

20.24 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

Protection against direct contact

Finger and back-of-hand proof to VDE 0106 part 100

Rated insulation voltage (Ui)

1000 V

Rated operating power at AC-3, 230 V

18.5 kW

Rated operating power at AC-3, 400 V

30 kW

**Switch off technique**

Thermomagnetic

**Degree of protection**

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

IP20

**Direction of incoming supply**

As required

**Electrical connection type of main circuit**

Screw connection

**Lifespan, mechanical**

20000 operations

**Overvoltage category**

III

**Rated operational current**

55 A (400 V AC-3)

**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)**

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

Min. 2 segments of 16 mm x 0.8 mm at rear-side connection  
(punched)

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

Max. 10 segments of 24 mm x 0.8 mm at rear-side connection  
(punched)

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 400 V AC-3

5000 operations at 690 V AC-3

7500 operations at 690 V AC-1

6500 operations at 415 V AC-3

10000 operations at 400 V AC-1

**Functions**

Motor protection

**Shock resistance**

20 g (half-sinusoidal shock 20 ms)

**Rated operational current for specified heat dissipation (In)**

63 A

**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**

882 A

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

504 A

**Handle type**

Rocker lever

**Instantaneous current setting (Ii) - max**

882 A

**Instantaneous current setting (Ii) - min**

504 A

**Number of operations per hour - max**

120

**Overload current setting (Ir) - max**

63 A

**Overload current setting (Ir) - min**

50 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**

130 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

## Standard terminals

### Screw terminal

## Optional terminals

Box terminal. Connection on rear. Tunnel terminal

## Release system

Thermomagnetic release

## Short-circuit total breaktime

< 10 ms

## Terminal capacity (aluminum solid conductor/cable)

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

## Terminal capacity (aluminum stranded conductor/cable)

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

## Terminal capacity (control cable)

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

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

## 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)

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

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

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

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

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

## Terminal capacity (copper stranded conductor/cable)

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) 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 1-hole tunnel terminal

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

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

130 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  $I_{cm}$  at 690 V, 50/60 Hz

40 kA

Rated short-circuit making capacity  $I_{cm}$  at 240 V, 50/60 Hz

330 kA

Rated impulse withstand voltage (U<sub>imp</sub>) at auxiliary contacts

6000 V

Rated impulse withstand voltage (U<sub>imp</sub>) at main contacts

8000 V

Power loss

20.2 W



Eaton Corporation plc

Eaton House

30 Pembroke Road

Dublin 4, Ireland

Eaton.com

© 2024 Eaton. All Rights Reserved.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.



Eaton.com/socialmedia