

# Eaton 269257

Catalog Number: 269257

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 63A, N2-S63-CNA



### General specifications

Product Name	Catalog Number
Eaton Moeller series NZM molded case circuit breaker magnetic	269257
	<a href="#">EAN</a>
	4015082692575
Product Length/Depth	Product Height
149 mm	195 mm
Product Width	Product Weight
105 mm	2.398 kg
Compliances	Certifications
RoHS conform	CSA-C22.2 No. 5-09
	UL (Category Control Number DKPU2)
	UL listed
	UL/CSA
	UL (File No. E31593)
	IEC 60947-2
	CSA certified
	UL 489
	IEC/EN 60947
	Specially designed for North America
	CSA (File No. 22086)
	CE marking
	IEC
	CSA (Class No. 1432-01)

## Product specifications

### 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

Switches conform to UL/CSA as well as the IEC regulations. IEC switching performance values are contained on the rating plate.

Motor protection in conjunction with contactor and overload relay

With short-circuit release

Without overload release  $I_r$

### Application

Branch circuits, feeder circuits

Use in unearthing supply systems at 690 V

### Amperage Rating

63 A

### Voltage rating

690 V - 690 V

### 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

## 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-let-through-current-nzm-mccb-characteristic-curve-004.eps](#)

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

[eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-036.eps](#)

### Declarations of conformity

[DA-DC-03\\_N2](#)

### Drawings

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

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

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

### eCAD model

[ETN.269257.edz](#)

### Installation videos

[The new digital NZM Range](#)

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

### mCAD model

[DA-CD-nzm2\\_3p](#)

[DA-CS-nzm2\\_3p](#)

### Technical data sheets

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

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

Fixed

Built-in device fixed built-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

3.77 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

#### Low-voltage HBC fuse - max

355 A gG/gL

#### 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

Magnetic

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

300 A (400 V AC-1, making and breaking capacity)

63 A (690 V AC-1, making and breaking capacity)

63 A (660-690 V AC-3, making and breaking capacity)

300 A (415 V AC-1, making and breaking capacity)

Degree of protection (IP), front side

IP40 (with insulating surround)

IP66 (with door coupling rotary handle)

Degree of protection (terminations)

IP10 (tunnel terminal)

IP00 (terminations, phase isolator and strip terminal)

Number of poles

Three-pole

Terminal capacity (copper strip)

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 rear-side connection

(punched)

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

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

Lifespan, electrical

10000 operations at 400 V AC-1

5000 operations at 690 V AC-3

7500 operations at 690 V AC-1

6500 operations at 400 V AC-3

6500 operations at 415 V AC-3

## Functions

Short-circuit 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

14 A

### Instantaneous current setting (Ii) - min

8 A

### Number of operations per hour - max

120

### Overload current setting (Ir) - max

0 A

### Overload current setting (Ir) - min

0 A

### Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, 50/60 Hz

85 kA

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

35 kA

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

35 kA

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

25 kA

### Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 690

V, 50/60 Hz

5 kA

#### Standard terminals

Screw terminal

#### Rated operating voltage Ue (UL) - max

600 V / 347 V, 480 V

#### 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 (control cable)

16 mm<sup>2</sup> - 18 mm<sup>2</sup> (2x)

14 mm<sup>2</sup> - 18 mm<sup>2</sup> (1x)

#### Terminal capacity (copper busbar)

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

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

M8 at rear-side screw connection

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

6 mm<sup>2</sup> - 12 mm<sup>2</sup> (1x) at box terminal

6 mm<sup>2</sup> - 11 mm<sup>2</sup> (1x) direct at switch rear-side connection

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

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

4 mm<sup>2</sup> - 3/0 mm<sup>2</sup> (1x) direct at switch rear-side connection

4 mm<sup>2</sup> - 350 mm<sup>2</sup> (1x) at box terminal

4 mm<sup>2</sup> - 350 mm<sup>2</sup> (1x) at tunnel terminal

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

35 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

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

187 kA

Rated impulse withstand voltage (Uiimp) at auxiliary contacts

6000 V

Rated impulse withstand voltage (Uiimp) at main contacts

8000 V

Power loss

3.8 W



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