

# Eaton 259082

Catalog Number: 259082

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 50A, N, frame1, A50

## General specifications

<b>Product Name</b>	<b>Catalog Number</b>
Eaton Moeller series NZM molded case circuit breaker thermo-magnetic	259082
	<b>EAN</b>
	4015082590826
<b>Product Length/Depth</b>	<b>Product Height</b>
88 mm	145 mm
<b>Product Width</b>	<b>Product Weight</b>
90 mm	1.066 kg
<b>Compliances</b>	<b>Certifications</b>
RoHS conform	IEC/EN 60947
	IEC
<b>Model Code</b>	
NZMN1-A50	

## Technical data - electrical

### Voltage rating

690 V - 690 V

### Voltage rating (DC)

450 VDC

### Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

### Rated impulse withstand voltage (Uimp) at main contacts

6000 V

### Amperage Rating

50 A

### Instantaneous current setting (Ii) - min

300 A

### Instantaneous current setting (Ii) - max

500 A

### Overload current setting (Ir) - min

40 A

### Overload current setting (Ir) - max

50 A

### Short delay current setting (I<sub>sd</sub>) - min

0 A

### Short delay current setting (I<sub>sd</sub>) - max

0 A

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

300 A

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

500 A

### Rated short-circuit breaking capacity I<sub>cs</sub> (IEC/EN 60947) at 230 V, 50/60 Hz

85 kA

### Rated short-circuit breaking capacity I<sub>cs</sub> (IEC/EN 60947) at 400/415 V, 50/60 Hz

50 kA

### Rated short-circuit breaking capacity I<sub>cs</sub> (IEC/EN 60947) at 440 V, 50/60 Hz

35 kA

### Rated short-circuit breaking capacity I<sub>cs</sub> (IEC/EN 60947) at 525 V, 50/60 Hz

## Technical data - communication

### Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

### Rated impulse withstand voltage (Uimp) at main contacts

6000 V

### Amperage Rating

50 A

### Instantaneous current setting (Ii) - min

300 A

### Instantaneous current setting (Ii) - max

500 A

### Overload current setting (Ir) - min

40 A

### Overload current setting (Ir) - max

50 A

### Short delay current setting (I<sub>sd</sub>) - min

0 A

### Short delay current setting (I<sub>sd</sub>) - max

0 A

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

300 A

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

500 A

### Rated short-circuit breaking capacity I<sub>cs</sub> (IEC/EN 60947) at 230 V, 50/60 Hz

85 kA

### Rated short-circuit breaking capacity I<sub>cs</sub> (IEC/EN 60947) at 400/415 V, 50/60 Hz

50 kA

### Rated short-circuit breaking capacity I<sub>cs</sub> (IEC/EN 60947) at 440 V, 50/60 Hz

35 kA

### Rated short-circuit breaking capacity I<sub>cs</sub> (IEC/EN 60947) at 525 V, 50/60 Hz

10 kA

### Rated short-circuit breaking capacity I<sub>cs</sub> (IEC/EN 60947) at 690 V, 50/60 Hz

7.5 kA

10 kA

Rated short-circuit breaking capacity  $I_{cs}$  (IEC/EN 60947) at 690 V, 50/60 Hz

7.5 kA

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

187 kA

Rated short-circuit making capacity  $I_{cm}$  at 400/415 V, 50/60 Hz

105 kA

Rated short-circuit making capacity  $I_{cm}$  at 440 V, 50/60 Hz

74 kA

Rated short-circuit making capacity  $I_{cm}$  at 525 V, 50/60 Hz

40 kA

Rated short-circuit making capacity  $I_{cm}$  at 690 V, 50/60 Hz

17 kA

Short-circuit total breaktime

< 10 ms

Electrical connection type of main circuit

Frame clamp

Isolation

300 V AC (between the auxiliary contacts)

500 V AC (between auxiliary contacts and main contacts)

Number of operations per hour - max

120

Handle type

Rocker lever

Utilization category

A (IEC/EN 60947-2)

Overvoltage category

III

Pollution degree

3

Lifespan, electrical

10000 operations at 415 V AC-1

7500 operations at 690 V AC-1

10000 operations at 400 V AC-1

Direction of incoming supply

As required

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

187 kA

Rated short-circuit making capacity  $I_{cm}$  at 400/415 V, 50/60 Hz

105 kA

Rated short-circuit making capacity  $I_{cm}$  at 440 V, 50/60 Hz

74 kA

Rated short-circuit making capacity  $I_{cm}$  at 525 V, 50/60 Hz

40 kA

Rated short-circuit making capacity  $I_{cm}$  at 690 V, 50/60 Hz

17 kA

Short-circuit total breaktime

< 10 ms

Electrical connection type of main circuit

Frame clamp

Isolation

300 V AC (between the auxiliary contacts)

500 V AC (between auxiliary contacts and main contacts)

Number of operations per hour - max

120

Handle type

Rocker lever

Utilization category

A (IEC/EN 60947-2)

Overvoltage category

III

Pollution degree

3

Lifespan, electrical

10000 operations at 415 V AC-1

7500 operations at 690 V AC-1

10000 operations at 400 V AC-1

Direction of incoming supply

As required

## Technical data - mechanical

Mounting Method

Built-in device fixed built-in technique

DIN rail (top hat rail) mounting optional

Fixed

#### Degree of protection

IP20

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

#### 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)

#### Protection against direct contact

Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part

110

#### Shock resistance

20 g (half-sinusoidal shock 20 ms)

#### Number of auxiliary contacts (change-over contacts)

0

#### Number of auxiliary contacts (normally closed contacts)

0

#### Number of auxiliary contacts (normally open contacts)

0

#### Position of connection for main current circuit

Front side

#### Climatic proofing

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

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

#### Lifespan, mechanical

20000 operations

## Resources

#### 3D models

[DA-CS-nzm1\\_3p](#)

[DA-CD-nzm1\\_3p](#)

#### 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](#)

#### Drawings

[123X506](#)

[123X039](#)

[eaton-circuit-breaker-switch-nzm-mccb-dimensions-014.eps](#)

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

[123I243](#)

[eaton-circuit-breaker-switch-nzm-mccb-3-d-drawing-006.eps](#)

#### User guides

[IL01203004Z](#)

#### Technical data sheets

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



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