

Eaton 281234

Catalog Number: 281234

Eaton Moeller series NZM - Molded Case Circuit Breaker. NZM1, 3 pole, Switching capacity 400/415 V 50 Hz(Icu): 50 kA, 160 A, Fixed, Box terminal, IEC

General specifications

Product Name	Catalog Number
Eaton Moeller series NZM molded case circuit breaker thermo-magnetic	281234
	EAN
	4015082812348
Product Length/Depth	Product Height
88 mm	145 mm
Product Width	Product Weight
90 mm	1.046 kg
Compliances	Certifications
RoHS conform	IEC
	IEC/EN 60947
Model Code	
NZMN1-A160	

Technical data - electrical

Voltage rating

690 V - 690 V

Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

Rated impulse withstand voltage (Uimp) at main contacts

6000 V

Amperage Rating

160 A

Instantaneous current setting (Ii) - min

960 A

Instantaneous current setting (Ii) - max

1600 A

Overload current setting (Ir) - min

125 A

Overload current setting (Ir) - max

160 A

Short delay current setting (I_{sd}) - min

0 A

Short delay current setting (I_{sd}) - max

0 A

Short-circuit release non-delayed setting - min

1280 A

Short-circuit release non-delayed setting - max

1280 A

Rated short-circuit breaking capacity I_{cs} (IEC/EN 60947) at 230 V, 50/60 Hz

85 kA

Rated short-circuit breaking capacity I_{cs} (IEC/EN 60947) at 400/415 V, 50/60 Hz

50 kA

Rated short-circuit breaking capacity I_{cs} (IEC/EN 60947) at 440 V, 50/60 Hz

35 kA

Rated short-circuit breaking capacity I_{cs} (IEC/EN 60947) at 525 V, 50/60 Hz

10 kA

Rated short-circuit breaking capacity I_{cs} (IEC/EN 60947) at 690

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

160 A

Instantaneous current setting (Ii) - min

960 A

Instantaneous current setting (Ii) - max

1600 A

Overload current setting (Ir) - min

125 A

Overload current setting (Ir) - max

160 A

Short delay current setting (I_{sd}) - min

0 A

Short delay current setting (I_{sd}) - max

0 A

Short-circuit release non-delayed setting - min

1280 A

Short-circuit release non-delayed setting - max

1280 A

Rated short-circuit breaking capacity I_{cs} (IEC/EN 60947) at 230 V, 50/60 Hz

85 kA

Rated short-circuit breaking capacity I_{cs} (IEC/EN 60947) at 400/415 V, 50/60 Hz

50 kA

Rated short-circuit breaking capacity I_{cs} (IEC/EN 60947) at 440 V, 50/60 Hz

35 kA

Rated short-circuit breaking capacity I_{cs} (IEC/EN 60947) at 525 V, 50/60 Hz

10 kA

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

7.5 kA

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

500 V AC (between auxiliary contacts and main contacts)

300 V AC (between the auxiliary 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

7500 operations at 400 V AC-1

5000 operations at 690 V AC-1

7500 operations at 415 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

500 V AC (between auxiliary contacts and main contacts)

300 V AC (between the auxiliary 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

7500 operations at 400 V AC-1

5000 operations at 690 V AC-1

7500 operations at 415 V AC-1

Direction of incoming supply

As required

Technical data - mechanical

Mounting Method

DIN rail (top hat rail) mounting optional

Built-in device fixed built-in technique

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, constant, to IEC 60068-2-78

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

Lifespan, mechanical

20000 operations

Resources

3D models

[DA-CD-nzm1_3p](#)

[DA-CS-nzm1_3p](#)

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](#)

Drawings

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

[123X506](#)

[123X039](#)

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

User guides

[IL01203004Z](#)

Technical data sheets

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



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

© 2023 Eaton. All rights reserved.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.



[Eaton.com/socialmedia](https://www.eaton.com/socialmedia)