

Eaton 109670

Catalog Number: 109670

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 400A, N3-A400



General specifications

Product Name	Catalog Number
Eaton Moeller series NZM - Molded Case Circuit Breaker	109670
	Model Code
	NZMN3-A400
EAN	Product Length/Depth
4015081092567	166 mm
Product Height	Product Width
275 mm	140 mm
Product Weight	Compliances
6.109 kg	RoHS conform
Certifications	
IEC	
IEC/EN 60947	

Technical data - electrical

Voltage rating

690 V - 690 V

Voltage rating (DC)

750 VDC

Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

Rated impulse withstand voltage (Uimp) at main contacts

8000 V

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

3.3 kA

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

3.3 kA

Amperage Rating

400 A

Instantaneous current setting (Ii) - min

2400 A

Instantaneous current setting (Ii) - max

4000 A

Overload current setting (Ir) - min

320 A

Overload current setting (Ir) - max

400 A

Short delay current setting (Isd) - min

0 A

Short delay current setting (Isd) - max

0 A

Short-circuit release non-delayed setting - min

2400 A

Short-circuit release non-delayed setting - max

4000 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

50 kA

Technical data - communication

Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

Rated impulse withstand voltage (Uimp) at main contacts

8000 V

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

3.3 kA

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

3.3 kA

Amperage Rating

400 A

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85 kA

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

50 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

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

13 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 690 V, 50/60 Hz

5 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 500 V DC

30 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 750 V DC

30 kA

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

187 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

Short-circuit total breaktime

< 10 ms

Electrical connection type of main circuit

Screw connection

Isolation

500 V AC (between auxiliary contacts and main contacts)

300 V AC (between the auxiliary contacts)

Number of operations per hour - max

60

Handle type

Rocker lever

Utilization category

A (IEC/EN 60947-2)

Overvoltage category

III

13 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 690 V, 50/60 Hz

5 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 500 V DC

30 kA

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 750 V DC

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

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Rated short-circuit making capacity Icm at 400/415 V, 50/60 Hz

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Rated short-circuit making capacity Icm at 440 V, 50/60 Hz

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Rated short-circuit making capacity Icm at 525 V, 50/60 Hz

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Short-circuit total breaktime

< 10 ms

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Screw connection

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60

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Utilization category

A (IEC/EN 60947-2)

Overvoltage category

III

Pollution degree

3

Lifespan, electrical

2000 operations at 690 V AC-3

Pollution degree

3

Lifespan, electrical

2000 operations at 690 V AC-3
2000 operations at 750 V DC-3
5000 operations at 750 V DC-1
3000 operations at 690 V AC-1
5000 operations at 400 V AC-1
2000 operations at 400 V AC-3
5000 operations at 500 V DC-1
2000 operations at 415 V AC-3
2000 operations at 500 V DC-3
5000 operations at 415 V AC-1

Direction of incoming supply

As required

2000 operations at 750 V DC-3
5000 operations at 750 V DC-1
3000 operations at 690 V AC-1
5000 operations at 400 V AC-1
2000 operations at 400 V AC-3
5000 operations at 500 V DC-1
2000 operations at 415 V AC-3
2000 operations at 500 V DC-3
5000 operations at 415 V AC-1

Direction of incoming supply

As required

Technical data - mechanical

Mounting Method

Fixed

Built-in device fixed built-in technique

Degree of protection

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

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)

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

15000 operations

Resources

Brochures

[eaton-feerum-the-whole-grain-solution-success-story-en-us.pdf](#)

[eaton-digital-nzm-brochure-br013003en-en-us.pdf](#)

Catalogues

[eaton-digital-nzm-catalog-ca013003en-en-us.pdf](#)

Certification reports

[DA-DC-NZM3-UKCA.pdf](#)

Characteristic curve

[eaton-circuit-breaker-nzm-mccb-characteristic-curve-034.eps](#)

[eaton-circuit-breaker-nzm-mccb-characteristic-curve-031.eps](#)

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

Drawings

[eaton-circuit-breaker-nzm-mccb-dimensions-020.eps](#)

[eaton-circuit-breaker-switch-nzm-mccb-dimensions-016.eps](#)

eCAD model

[DA-CE-ETN.NZMN3-A400](#)

Installation instructions

[IL01208009Z](#)

Installation videos

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

[The new digital NZM Range](#)

mCAD model

[DA-CS-nzm3_3p](#)

[DA-CD-nzm3_3p](#)

Technical data sheets

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



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