

Eaton 280987

Catalog Number: 280987

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 20A, B, frame 1, A20



General specifications

Product Name	Catalog Number
Eaton Moeller series NZM molded case circuit breaker thermo-magnetic	280987
	Model Code
	NZMB1-A20
	Product Length/Depth
	88 mm
	Product Width
	90 mm
	Compliances
	RoHS conform
	Certifications
	IEC
	IEC/EN 60947

Datos técnicos - eléctricos

Voltage rating

440 V - 440 V

Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

Rated impulse withstand voltage (Uimp) at main contacts

6000 V

Amperage Rating

20 A

Instantaneous current setting (Ii) - min

350 A

Instantaneous current setting (Ii) - max

350 A

Overload current setting (Ir) - min

15 A

Overload current setting (Ir) - max

20 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

350 A

Short-circuit release non-delayed setting - max

350 A

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

30 kA

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

25 kA

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

18.5 kA

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

63 kA

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

53 kA

Datos técnicos - comunicación

Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

Rated impulse withstand voltage (Uimp) at main contacts

6000 V

Amperage Rating

20 A

Instantaneous current setting (Ii) - min

350 A

Instantaneous current setting (Ii) - max

350 A

Overload current setting (Ir) - min

15 A

Overload current setting (Ir) - max

20 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

350 A

Short-circuit release non-delayed setting - max

350 A

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

30 kA

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

25 kA

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

18.5 kA

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

63 kA

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

53 kA

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

53 kA

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

53 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

7500 operations at 415 V AC-1

7500 operations at 400 V AC-1

Direction of incoming supply

As required

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

7500 operations at 415 V AC-1

7500 operations at 400 V AC-1

Direction of incoming supply

As required

Datos técnicos - mecánicos

Mounting Method

DIN rail (top hat rail) mounting optional

Built-in device fixed built-in technique

Fixed

Degree of protection

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

IP20

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)

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

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](#)

Characteristic curve

[eaton-circuit-breaker-nzm-mccb-characteristic-curve-051.eps](#)

[eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-038.eps](#)

[eaton-circuit-breaker-characteristic-power-defense-mccb-characteristic-curve-032.eps](#)

Drawings

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

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

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

eCAD model

[ETN.NZMB1-A20](#)

Installation instructions

[eaton-circuit-breakers-nzm-pn1-nzmbc-nzmbn-circuit-breaker-switch-disconnector-instruction-leaflet-il01203004z.pdf](#)

Installation videos

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

[The new digital NZM Range](#)

mCAD model

[DA-CD-nzm1_3p](#)

[DA-CS-nzm1_3p](#)

Technical data sheets

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



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