

Eaton 152531

Catalog Number: 152531

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



General specifications

Product Name	Catalog Number
Eaton Moeller series NZM molded case circuit breaker thermo-magnetic	152531
	Model Code
	NZMB1-1-AF20
EAN	Product Length/Depth
4015081490271	88 mm
Product Height	Product Width
145 mm	30 mm
Product Weight	Compliances
0.439 kg	RoHS conform
Certifications	
IEC	
IEC/EN 60947	

Technical data - electrical

Voltage rating

230 V - 230 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

320 A

Instantaneous current setting (Ii) - max

320 A

Overload current setting (Ir) - min

20 A

Overload current setting (Ir) - max

20 A

Short delay current setting (Isd) - min

0 A

Short delay current setting (Isd) - max

0 A

Short-circuit release non-delayed setting - min

320 A

Short-circuit release non-delayed setting - max

320 A

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

25 kA

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

25 kA

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

18.5 kA

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

55 kA

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

53 kA

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

20 A

Instantaneous current setting (Ii) - min

320 A

Instantaneous current setting (Ii) - max

320 A

Overload current setting (Ir) - min

20 A

Overload current setting (Ir) - max

20 A

Short delay current setting (Isd) - min

0 A

Short delay current setting (Isd) - max

0 A

Short-circuit release non-delayed setting - min

320 A

Short-circuit release non-delayed setting - max

320 A

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

25 kA

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

25 kA

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

18.5 kA

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

55 kA

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

53 kA

Rated short-circuit making capacity Icm 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

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

Direction of incoming supply

As required

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

Direction of incoming supply

As required

Technical data - mechanical

Mounting Method

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

IP40 (with insulating surround)

IP66 (with door coupling rotary handle)

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

Brochures

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

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

Catalogues

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

Characteristic curve

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

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

eCAD model

[DA-CE-ETN.NZMB1-1-AF20](#)

Installation videos

[The new digital NZM Range](#)

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

mCAD model

[DA-CS-nzm1_1p](#)

[DA-CD-nzm1_1p](#)

Technical data sheets

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



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