

Eaton 152537

Catalog Number: 152537

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 1p, 80A, B

General specifications



Product Name	Catalog Number
Eaton Moeller series NZM molded case circuit breaker thermo-magnetic	152537

Model Code
NZMB1-1-AF80

EAN	Product Length/Depth
4015081492831	88 mm

Product Height	Product Width
145 mm	30 mm

Product Weight	Compliances
0.438 kg	RoHS conform

Certifications
IEC/EN 60947
IEC

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

80 A

Instantaneous current setting (Ii) - min

1000 A

Instantaneous current setting (Ii) - max

1000 A

Overload current setting (Ir) - min

80 A

Overload current setting (Ir) - max

80 A

Short delay current setting (Isd) - min

0 A

Short delay current setting (Isd) - max

0 A

Short-circuit release non-delayed setting - min

1000 A

Short-circuit release non-delayed setting - max

1000 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

80 A

Instantaneous current setting (Ii) - min

1000 A

Instantaneous current setting (Ii) - max

1000 A

Overload current setting (Ir) - min

80 A

Overload current setting (Ir) - max

80 A

Short delay current setting (Isd) - min

0 A

Short delay current setting (Isd) - max

0 A

Short-circuit release non-delayed setting - min

1000 A

Short-circuit release non-delayed setting - max

1000 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

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

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

Direction of incoming supply

As required

Technical data - mechanical

Mounting Method

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-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-AF80](#)

Installation videos

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

[The new digital NZM Range](#)

mCAD model

[DA-CD-nzm1_1p](#)

[DA-CS-nzm1_1p](#)

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](#)