# Eaton 265782



# Catalog Number: 265782

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuitbreaker, 3p, 350A, NZMN3-ME350

# General specifications

IEC/EN 60947

IEC

Product Name	Catalog Number
Eaton Moeller series NZM molded case	265782
circuit breaker electronic	Model Code NZMN3-ME350
EAN	Product Length/Depth
4015082657826	166 mm
Product Height	Product Width
275 mm	140 mm
Product Weight	Compliances
6.914 kg	RoHS conform
Certifications	



# defaultTaxonomyAttributeLabel

#### Туре

Circuit breaker

# Special features

IEC/EN 60947-4-1, IEC/EN 60947-2 The circuit-breaker fulfills all requirements for AC-3 switching category. R.m.s. value measurement and "thermal memory" Adjustable time delay setting to overcome current peaks tr at 6 x Ir also infinity (without overload releases) All AC-3 rating data applies to direct switching by the circuit-breaker under normal operating conditions. If, for example, a contactor takes over AC-3 switching under normal operating conditions, the full rated uninterrupted current applies to the circuitbreaker, In = Iu. Maximum back-up fuse, if the expected short-circuit currents at the installation location exceed the switching capacity of the circuit breaker (Rated shortcircuit breaking capacity Icn) Rated current = rated uninterrupted current: 350 A Terminal capacity hint: Up to 240 mm<sup>2</sup> can be connected depending on the cable manufacturer.

# Application

Use in unearthed supply systems at 690 V

Amperage Rating 350 A

Voltage rating 690 V - 690 V

# Resources

#### 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

Certification reports DA-DC-03 N3

#### Characteristic curve

eaton-circuit-breaker-nzm-mccb-characteristic-curve-017.eps eaton-circuit-breaker-nzm-mccb-characteristic-curve-056.eps eaton-circuit-breaker-let-through-current-nzm-mccb-characteristic-curve-006.eps

#### Drawings

eaton-circuit-breaker-nzm-mccb-dimensions-020.eps eaton-circuit-breaker-switch-nzm-mccb-dimensions-016.eps eaton-general-ie-ready-dilm-contactor-standards.eps eaton-circuit-breaker-switch-nzm-mccb-3d-drawing-002.eps

eCAD model

ETN.265782.edz

DA-CE-ETN.NZMN3-ME350

Installation instructions IL01208009Z

Installation videos The new digital NZM Range Introduction of the new digital circuit breaker NZM

mCAD model DA-CS-nzm3\_3p

DA-CD-nzm3\_3p

Technical data sheets eaton-nzm-technical-information-sheet

Wiring diagrams eaton-manual-motor-starters-starter-msc-r-reversing-starter-wiringdiagram.eps

eaton-manual-motor-starters-starter-nzm-mccb-wiring-diagram.eps

# Circuit breaker frame type

NZM3

# 10.10 Temperature rise

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

# 10.11 Short-circuit rating

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

#### 10.12 Electromagnetic compatibility

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

# 10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

# 10.2.2 Corrosion resistance

Meets the product standard's requirements.

# 10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects

Meets the product standard's requirements.

# 10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

# 10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

#### 10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

#### 10.2.7 Inscriptions

Meets the product standard's requirements.

# 10.3 Degree of protection of assemblies

Does not apply, since the entire switchgear needs to be evaluated.

#### 10.4 Clearances and creepage distances

Meets the product standard's requirements.

# 10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

#### 10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

#### 10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

### 10.8 Connections for external conductors

Is the panel builder's responsibility.

#### 10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

# 10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

# 10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

# Fitted with:

Thermal protection

# Pollution degree

3

## **Mounting Method**

Fixed Built-in device fixed built-in technique

# **Climatic proofing**

Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30

Equipment heat dissipation, current-dependent 36.75 W

Utilization category A (IEC/EN 60947-2)

# Isolation

300 V AC (between the auxiliary contacts)500 V AC (between auxiliary contacts and main contacts)

# Ambient operating temperature - max 70 °C

Ambient operating temperature - min -25 °C

Ambient storage temperature - max

70 °C

Ambient storage temperature - min

40 °C

Protection against direct contact Finger and back-of-hand proof to VDE 0106 part 100

Rated insulation voltage (Ui)

1000 V

Rated operating power at AC-3, 230 V

110 kW

Rated operating power at AC-3, 400 V 200 kW

Switch off technique

Electronic

# Degree of protection

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

Direction of incoming supply

As required

Electrical connection type of main circuit Screw connection

Lifespan, mechanical

15000 operations

Overvoltage category

III

# Rated operational current

316 A (690 V AC-3) 349 A (400 V AC-3)

# 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)

# Number of poles

Three-pole

# Terminal capacity (copper strip)

Min. 6 segments of 16 mm x 0.8 mm at box terminal
10 segments of 50 mm x 1 mm (2x) at rear-side width extension
Max. 10 segments of 24 mm x 1 mm + 5 segments of 24 mm x 1

mm at box terminal Max. 10 segments of 32 mm x 1 mm + 5 segments of 32 mm x 1 mm at rear-side connection (punched) Max. 8 segments of 24 mm x 1 mm (2x) at box terminal Min. 6 segments of 16 mm x 0.8 mm at rear-side connection (punched)

### Lifespan, electrical

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

#### **Functions**

Motor protection Phase failure sensitive

# Shock resistance

20 g (half-sinusoidal shock 20 ms)

Rated operational current for specified heat dissipation (In) 350 A

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

3.3 kA

Rated short-time withstand current (t = 1 s) 3.3 kA

Short-circuit release non-delayed setting - max 4900 A

Short-circuit release non-delayed setting - min 700 A

Handle type

Rocker lever

Instantaneous current setting (li) - max 4900 A

Instantaneous current setting (li) - min 350 A

Number of operations per hour - max

60

Overload current setting (Ir) - max 350 A

Overload current setting (Ir) - min

175 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

# 35 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

#### 13 kA

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

5 kA

#### Standard terminals

Screw terminal

# Optional terminals

Box terminal. Connection on rear. Tunnel terminal

### Release system

Electronic release

# Short-circuit total breaktime

< 10 ms

## Terminal capacity (aluminum solid conductor/cable)

16 mm<sup>2</sup> (1x) at tunnel terminal
16 mm<sup>2</sup> (1x) direct at switch rear-side connection
10 mm<sup>2</sup> - 16 mm<sup>2</sup> (2x) direct at switch rear-side connection

#### Terminal capacity (aluminum stranded conductor/cable)

50 mm<sup>2</sup> - 240 mm<sup>2</sup> (1x) at 2-hole tunnel terminal 50 mm<sup>2</sup> - 240 mm<sup>2</sup> (2x) at 2-hole tunnel terminal 25 mm<sup>2</sup> - 185 mm<sup>2</sup> (1x) at tunnel terminal 25 mm<sup>2</sup> - 120 mm<sup>2</sup> (1x) direct at switch rear-side connection 25 mm<sup>2</sup> - 120 mm<sup>2</sup> (2x) direct at switch rear-side connection

# Terminal capacity (control cable)

0.75 mm<sup>2</sup> - 2.5 mm<sup>2</sup> (1x) 0.75 mm<sup>2</sup> - 1.5 mm<sup>2</sup> (2x)

# Terminal capacity (copper busbar)

M10 at rear-side screw connection Min. 20 mm x 5 mm direct at switch rear-side connection Max. 30 mm x 10 mm + 30 mm x 5 mm direct at switch rear-side connection Max. 10 mm x 50 mm (2x) at rear-side width extension

# Terminal capacity (copper solid conductor/cable)

16 mm<sup>2</sup> (2x) at box terminal

16 mm² (1x) direct at switch rear-side connection

16 mm<sup>2</sup> (2x) direct at switch rear-side connection

16 mm<sup>2</sup> (1x) at tunnel terminal

300 mm<sup>2</sup> (2x) at rear-side width extension

# Terminal capacity (copper stranded conductor/cable)

25 mm<sup>2</sup> - 120 mm<sup>2</sup> (2x) at box terminal
25 mm<sup>2</sup> - 240 mm<sup>2</sup> (1x) direct at switch rear-side connection
35 mm<sup>2</sup> - 240 mm<sup>2</sup> (1x) at box terminal
16 mm<sup>2</sup> - 185 mm<sup>2</sup> (1x) at 1-hole tunnel terminal
50 mm<sup>2</sup> - 240 mm<sup>2</sup> (2x) at 2-hole tunnel terminal
25 mm<sup>2</sup> - 240 mm<sup>2</sup> (2x) direct at switch rear-side connection

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

35 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

Rated short-circuit making capacity Icm at 240 V, 50/60 Hz 187 kA

Rated impulse withstand voltage (Uimp) at auxiliary contacts 6000 V

Rated impulse withstand voltage (Uimp) at main contacts 8000 V



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