# Eaton 265776

# Catalog Number: 265776

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 1250A

# General specifications



Eaton Moeller series NZM molded case 265776

circuit breaker electronic

EAN

4015082657765

Product Length/Depth Product Height

401 mm 207 mm

Product Width Product Weight

210 mm 21 kg

Compliances Certifications

RoHS conform IEC

IEC/EN 60947





# Product specifications

#### Type

Circuit breaker

#### Special features

Maximum back-up fuse, if

the expected short-circuit

currents at the installation

location exceed the

switching capacity of the

circuit breaker (Rated short-

circuit breaking capacity Icn)

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)

Adjustable delay time tsd

i2t constant function:

switchable

Rated current = rated

uninterrupted current: 1250

Α

#### Application

Use in unearthed supply systems at 525 V

#### **Amperage Rating**

1250 A

#### Voltage rating

690 V - 690 V

#### Circuit breaker frame type

NZM4

#### **Features**

Motor drive optional

Protection unit

#### 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.

### 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

#### Characteristic curve

eaton-circuit-breaker-nzm-mccb-characteristic-curve-048.eps eaton-circuit-breaker-nzm-mccb-characteristic-curve-049.eps

# **Drawings**

eaton-circuit-breaker-nzm-mccb-dimensions-022.eps

#### eCAD model

ETN.265776.edz

#### Installation instructions

eaton-circuit-breaker-basic-unit-nzmn4-il01210010z.pdf

#### Installation videos

The new digital NZM Range

Introduction of the new digital circuit breaker NZM

#### mCAD model

DA-CS-nzm4\_3p

DA-CD-nzm4\_3p

#### Technical data sheets

eaton-nzm-technical-information-sheet

#### 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.

#### Pollution degree

3

# Mounting Method

Built-in device fixed built-in technique

Fixed

### Climatic proofing

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

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

# Equipment heat dissipation, current-dependent

173.44 W

# Utilization category

B (IEC/EN 60947-2)

#### Isolation

500 V AC (between auxiliary contacts and main contacts)

300 V AC (between the auxiliary 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

#### Number of auxiliary contacts (change-over contacts)

0

# Number of auxiliary contacts (normally closed contacts)

0

# Number of auxiliary contacts (normally open contacts)

0

#### Protection against direct contact

Finger and back-of-hand proof to DIN EN 50274/VDE 0106 part 110

#### Degree of protection

IP20

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

# Direction of incoming supply

As required

# Electrical connection type of main circuit

Screw connection

#### Lifespan, mechanical

10000 operations

#### Overvoltage category

Ш

# Degree of protection (IP), front side

IP66 (with door coupling rotary handle)
IP40 (with insulating surround)

# Degree of protection (terminations)

IP00 (terminations, phase isolator and strip terminal)
IP10 (tunnel terminal)

#### Number of poles

Three-pole

# Terminal capacity (copper strip)

10 segments of 50 mm  $\times$  1 mm (2 $\times$ ) at 1-hole module plate Min. 5 segments of 25 mm  $\times$  1 mm at rear-side connection (punched)

Min. 6 segments of 16 mm x 0.8 mm at flat conductor terminal 10 segments of 80 mm x 1 mm (2x) at rear-side width extension Max. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched)

Max. 10 segments of 32 mm x 1 mm (2x) at flat conductor terminal

# Lifespan, electrical

2000 operations at 415 V AC-3

3000 operations at 415 V AC-1

1000 operations at 690 V AC-3

2000 operations at 690 V AC-1

3000 operations at 400 V AC-1

2000 operations at 400 V AC-3

# **Functions**

Systems, cable, selectivity and generator protection

#### Shock resistance

15 g (half-sinusoidal shock 11 ms)

Position of connection for main current circuit

Front side

Rated operational current for specified heat dissipation (In)

1250 A

Release system

Electronic release

Short-circuit total breaktime

< 25 ms ( 415 V); < 35 ms (> 415 V)

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

19.2 kA

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

19.2 kA

Short-circuit release delayed setting - max

12500 A

Short-circuit release delayed setting - min

1260 A

Short-circuit release non-delayed setting - max

15000 A

Short-circuit release non-delayed setting - min

2500 A

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

Max. 50 mm x 10 mm (2x) direct at switch rear-side connection

Min. 25 mm x 5 mm at rear-side 1-hole module plate

Min. 60 mm x 10 mm at rear-side width extension

Max. 50 mm x 10 mm (2x) at rear-side 1-hole module plate

50 mm x 10 mm (2x) at rear-side 2-hole module plate

Max. 80 mm x 10 mm (2x) at rear-side width extension

Min. 25 mm x 5 mm direct at switch rear-side connection

# Terminal capacity (copper solid conductor/cable)

300 mm<sup>2</sup> (4x) at rear-side width extension

95 mm<sup>2</sup> - 240 mm<sup>2</sup> (6x) at rear-side width extension

35 mm<sup>2</sup> - 185 mm<sup>2</sup> (4x) at rear-side 2-hole module plate

50 mm<sup>2</sup> - 240 mm<sup>2</sup> (4x) at 4-hole tunnel terminal

95 mm<sup>2</sup> - 300 mm<sup>2</sup> (2x) at rear-side 1-hole module plate

95 mm<sup>2</sup> - 185 mm<sup>2</sup> (2x) at rear-side 2-hole module plate 120 mm<sup>2</sup> - 300 mm<sup>2</sup> (1x) at rear-side 1-hole module plate Terminal capacity (aluminum solid conductor/cable) 70 mm<sup>2</sup> - 240 mm<sup>2</sup> (6x) at rear-side width extension 240 mm<sup>2</sup> (2x) at rear-side width extension 50 mm<sup>2</sup> (4x) at rear-side 2-hole module plate 185 mm<sup>2</sup> - 240 mm<sup>2</sup> (1x) at rear-side 1-hole module plate 70 mm<sup>2</sup> - 185 mm<sup>2</sup> (2x) at rear-side 1-hole module plate Terminal capacity (copper stranded conductor/cable) 50 mm<sup>2</sup> - 185 mm<sup>2</sup> (4x) direct at switch rear-side connection 120 mm<sup>2</sup> - 185 mm<sup>2</sup> (1x) direct at switch rear-side connection Terminal capacity (aluminum stranded conductor/cable) 50 mm<sup>2</sup> - 240 mm<sup>2</sup> (4x) at 4-hole tunnel terminal Handle type Rocker lever Short delay current setting (Isd) - max 12500 A Short delay current setting (Isd) - min 1250 A Instantaneous current setting (li) - max 15000 A Instantaneous current setting (Ii) - min 2500 A Number of operations per hour - max Overload current setting (Ir) - max 1250 A Overload current setting (Ir) - min 630 A Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, 50/60 Hz 63 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

Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 525 V, 50/60 Hz 50 kA

50 kA

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

37 kA

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

187 kA

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

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

143 kA

Rated short-circuit making capacity Icm at 690 V, 50/60 Hz

100 kA

Standard terminals

Screw terminal

Optional terminals

Connection on rear. Strip terminal. Tunnel terminal

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

275 kA

Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

Rated impulse withstand voltage (Uimp) at main contacts

8000 V

Rated insulation voltage (Ui)

1000 V AC



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