Eaton 265759

Catalog Number: 265759

Eaton Moeller series NZM - Molded Case Circuit Breaker. Circuit-breaker, 3p, 800A, N, frame 4, AE800

General specifications



Product Length/Depth Product Height 401 mm 207 mm

Product Width
Product Weight
210 mm
15.52 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"

Rated current = rated

uninterrupted current: 800 A

Application

Use in unearthed supply systems at 525 V

Amperage Rating

800 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.

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.

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-047.eps

Declarations of conformity

DA-DC-03_N4

Drawings

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

eCAD model

ETN.265759.edz

Installation instructions

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

Installation videos

Introduction of the new digital circuit breaker NZM

The new digital NZM Range

mCAD model

DA-CS-nzm4_3p

DA-CD-nzm4_3p

Technical data sheets

eaton-nzm-technical-information-sheet

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 Fixed Built-in device fixed built-in technique Climatic proofing Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Equipment heat dissipation, current-dependent 106 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 Number of auxiliary contacts (change-over contacts) 0 Number of auxiliary contacts (normally closed contacts) 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 Connection Screw

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

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)

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

Min. 6 segments of 16 mm x 0.8 mm at flat conductor terminal

Min. 5 segments of 25 mm x 1 mm at rear-side connection (punched)

10 segments of 50 mm x 1 mm (2x) at 1-hole module plate

Max. 10 segments of 50 mm x 1 mm (2x) at rear-side connection (punched)

10 segments of 80 mm x 1 mm (2x) at rear-side width extension

Lifespan, electrical

2000 operations at 415 V AC-3

3000 operations at 400 V AC-1

3000 operations at 415 V AC-1

2000 operations at 400 V AC-3

2000 operations at 690 V AC-1

1000 operations at 690 V AC-3

Functions

System and cable 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)

800 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)

12 kA

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

12 kA

Short-circuit release non-delayed setting - max

12000 A

Short-circuit release non-delayed setting - min

1600 A

Terminal capacity (control cable)

0.75 mm² - 1.5 mm² (2x)

0.75 mm² - 2.5 mm² (1x)

Terminal capacity (copper busbar)

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

M10 at rear-side screw connection

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

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

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

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

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

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

Terminal capacity (copper solid conductor/cable)

35 mm² - 185 mm² (4x) at rear-side 2-hole module plate

95 mm² - 300 mm² (2x) at rear-side 1-hole module plate

95 mm² - 185 mm² (2x) at rear-side 2-hole module plate

300 mm² (4x) at rear-side width extension

50 mm² - 240 mm² (4x) at 4-hole tunnel terminal

95 mm² - 240 mm² (6x) at rear-side width extension

120 mm² - 300 mm² (1x) at rear-side 1-hole module plate

Terminal capacity (aluminum solid conductor/cable)

185 mm² - 240 mm² (1x) at rear-side 1-hole module plate

240 mm² (2x) at rear-side width extension

70 mm² - 185 mm² (2x) at rear-side 1-hole module plate

50 mm² (4x) at rear-side 2-hole module plate

70 mm² - 240 mm² (6x) at rear-side width extension

Terminal capacity (copper stranded conductor/cable)

50 mm² - 185 mm² (4x) direct at switch rear-side connection 120 mm² - 185 mm² (1x) direct at switch rear-side connection Terminal capacity (aluminum stranded conductor/cable) 50 mm² - 240 mm² (4x) at 4-hole tunnel terminal Handle type Rocker lever Short delay current setting (Isd) - max 0 A Short delay current setting (Isd) - min 0 A Instantaneous current setting (li) - max 9600 A Instantaneous current setting (li) - min 1600 A Number of operations per hour - max Overload current setting (Ir) - max 800 A Overload current setting (Ir) - min 400 A Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 230 V, 50/60 Hz 37 kA Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 400/415 V, 50/60 Hz 37 kA Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 440 V, 50/60 Hz 26 kA Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 525 V, 50/60 Hz 19 kA Rated short-circuit breaking capacity Ics (IEC/EN 60947) at 690 V, 50/60 Hz 15 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

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

40 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

105 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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