Produktspesifikasjoner

Eaton 192164

Catalog Number: 192164

Eaton Moeller series NZM - Molded Case Circuit Breaker. NZM2 PXR25, class 1, 100A, 3p, Screw terminal, plug-in technology, N, 2

General specifications

Product Name
Eaton Moeller series NZM molded case circuit breaker electronic

Catalog Number
192164

EL Number
4362778
3183714

Product Length/Depth
190 mm

Product Height
160 mm

Product Width
115 mm

Product Weight
2.4 kg

Compliances
RoHS conform

Certifications
IEC
IEC/EN 60947

Model Code
NZMN2-PX100-SVE

Powering Business Worldwide

Produktspesifikasjoner

Rated operational current for specified heat dissipation (In)

100 A

10.11 Short-circuit rating

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

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

5 kA

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.12 Electromagnetic compatibility

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

Mounting Method

Plug-in unit
Built-in device plug-in technique

Amperage Rating

100 A

10.2.5 Lifting

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

Terminal capacity (copper strip)

Min. 2 segments of 9 mm x 0.8 mm at box terminal
Max. 10 segments of 16 mm x 0.8 mm at box terminal
Min. 2 segements of 16 mm x 0.8 mm at rear-side connection (punched)
Max. 8 segments of 24 mm x 1 mm (2x) at box terminal
Max. 10 segments of 24 mm x 0.8 mm at rear-side connection (punched)

Handle type

Rocker lever

10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

Ambient storage temperature - min

40 °C

Protection against direct contact

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

For nedlasting

Characteristic curve

eaton-circuit-breaker-nzm-mccb-characteristic-curve-059.eps

eaton-circuit-breaker-nzm-mccb-characteristic-curve-060.eps

Installeringsinstruksjoner

IL01219023Z

IL012099ZU

mCAD model

DA-CD-nzm2_3p

DA-CS-nzm2_3p

Sertifiseringsrapporter

DA-DC-03_N2

Tegninger

eaton-circuit-breaker-nzm-mccb-dimensions-019.eps

eaton-circuit-breaker-adapter-nzm-mccb-dimensions-002.eps

Terminal capacity (copper busbar)

M8 at rear-side screw connection

Max. 24 mm x 8 mm direct at switch rear-side connection

Min. 16 mm x 5 mm direct at switch rear-side connection

10.8 Connections for external conductors

Is the panel builder's responsibility.

Special features

LSI overload protection and delayed and non-delayed short-circuit protective device Class 1 energy measurement, r.m.s. value measurement, and "thermal memory" USB interface for configuration and test function with Power Xpert Protection Manager software Interface module in equipment supplied. Optionally communication-capable with internal Modbus RTU module or CAM 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) Rated current = rated uninterrupted current: 100 A

Ambient operating temperature - max

70 °C

Position of connection for main current circuit

Connection at separate chassis part

Rated insulation voltage (Ui)

690 V AC

Climatic proofing

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

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

Terminal capacity (copper stranded conductor/cable)

25 mm² - 185 mm² (1x) at box terminal

25 mm² - 185 mm² (1x) at 1-hole tunnel terminal

25 mm² - 70 mm² (2x) at box terminal

25 mm² - 70 mm² (2x) direct at switch rear-side connection

25 mm² - 185 mm² (1x) direct at switch rear-side connection

Features

Protection unit

Motor drive optional

Lifespan, electrical

10000 operations at 415 V AC-1

7500 operations at 690 V AC-1

10000 operations at 400 V AC-1

Electrical connection type of main circuit

Other

Short-circuit total breaktime

< 10 ms

Rated impulse withstand voltage (Uimp) at main contacts

8000 V

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

50 kA

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

Utilization category

A (IEC/EN 60947-2)

Number of poles

Three-pole

Ambient operating temperature - min

-25 °C

10.6 Incorporation of switching devices and components

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

10.5 Protection against electric shock

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

Terminal capacity (control cable)

0.75 mm² - 1.5 mm² (2x)

0.75 mm² - 2.5 mm² (1x)

Equipment heat dissipation, current-dependent

8.25 W

Instantaneous current setting (Ii) - min

2 A

10.13 Mechanical function

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

10.2.6 Mechanical impact

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

10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

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

85 kA

Application

Use in unearthed supply systems at 690 V

10.3 Degree of protection of assemblies

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

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

187 kA

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

35 kA

Short-circuit release delayed setting - max

1000 A

Degree of protection (IP), front side

IP66 (with door coupling rotary handle)

IP40 (with insulating surround)

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

Instantaneous current setting (Ii) - max

18 A

Overload current setting (Ir) - min

40 A

Short delay current setting (Isd) - min

2 A

Number of auxiliary contacts (normally closed contacts)

0

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.

Lifespan, mechanical

20000 operations

Overload current setting (Ir) - max

100 A

Voltage rating

690 V - 690 V

Terminal capacity (copper solid conductor/cable)

10 mm² - 16 mm² (1x) at box terminal

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

6 mm² - 16 mm² (2x) direct at switch rear-side connection

16 mm² (1x) at tunnel terminal

6 mm² - 16 mm² (2x) at box terminal

Degree of protection (terminations)

IP10 (tunnel terminal)

IP00 (terminations, phase isolator and strip terminal)

Short-circuit release delayed setting - min

80 A

Terminal capacity (aluminum stranded conductor/cable)

25 mm² - 185 mm² (1x) at tunnel terminal

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

Short-circuit release non-delayed setting - min

200 A

Degree of protection

IP20

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

Overvoltage category

III

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

1.9 kA

Short delay current setting (Isd) - max

10 A

Rated impulse withstand voltage (Uimp) at auxiliary contacts

6000 V

Number of auxiliary contacts (change-over contacts)

0

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

1.9 kA

Accessories required

NZM2-XSVS

Ambient storage temperature - max

70 °C

Release system

Electronic release

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

25 kA

Optional terminals

Box terminal. Connection on rear. Tunnel terminal

Pollution degree

3

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

10.10 Temperature rise

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

Functions

Systems, cable, selectivity and generator protection

Short-circuit release non-delayed setting - max

1800 A

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

105 kA

Standard terminals

Screw terminal

Type

Circuit breaker

10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2.7 Inscriptions

Meets the product standard's requirements.

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

74 kA

Number of auxiliary contacts (normally open contacts)

0

Isolation

500 V AC (between auxiliary contacts and main contacts)

300 V AC (between the auxiliary contacts)

Number of operations per hour - max

120

Circuit breaker frame type

NZM2

Direction of incoming supply

As required

Shock resistance

20 g (half-sinusoidal shock 20 ms)

Terminal capacity (aluminum solid conductor/cable)

16 mm² (1x) at tunnel terminal