NZMN3-4-A320-SVE - Circuit-breaker, 4p, 320A, plug-in module

168508 NZMN3-4-A320-SVE

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Circuit-breaker, 4p, 320A, plug-in module

Alternate Catalog No.	NZMN3-4-A320-SVE
EL-Nummer (Norway)	4357593

Series NZM.-A circuit-breakers cover all application cases with just four compact sizes and are suitable for the IEC market. Modular function groups always make mounting flexible. With thermomagnetic releases for systems and cable protection. Notes: set value in neutral conductor is synchronous with set value Ir of phase conductor.

- Delivery program
- Technical data
- Design verification as per IEC/EN 61439
- Technical data ETIM 7.0

Delivery program

Switching capacity
400/415 V 50 Hz [I_{cu}]
50 kA
Rated current = rated uninterrupted current [$I_n = I_u$]
Rated current = rated uninterrupted current [$I_n = I_u$]
320 A
Neutral conductor [% of phase conductor]
100 %
Setting range
Overload tripMain pole [I_r]
250 - 320 A
Short-circuit releases [I_{rm}]Non-delayed [$I_i = I_n$ x ...]
6 - 10

Technical data

General
Ambient temperatureAmbient temperature, storage
- 40 - + 70 °C
Ambient temperatureOperation
-25 - +70 °C
Circuit-breakers
Rated current = rated uninterrupted current [$I_n = I_u$]
320 A

Use in unearthed supply systems
□ 690 V
Switching capacity
Rated short-circuit making capacity [I_{cm}]240 V [I_{cm}]
330 kA
Rated short-circuit breaking capacity I_{cn} [I_{cn}]Icu to IEC/EN 60947 test cycle O-t-CO [Icu]400/415 V 50/60 Hz [I_{cu}]
50 kA
Rated short-circuit breaking capacity I_{cn} [I_{cn}]Icu to IEC/EN 60947 test cycle O-t-CO [Icu]500 V DC [I_{cu}]
30 kA
Rated short-circuit breaking capacity I_{cn} [I_{cn}]Icu to IEC/EN 60947 test cycle O-t-CO [Icu]750 V DC [I_{cu}]
30 kA
Rated short-circuit breaking capacity I_{cn} [I_{cn}]Ics to IEC/EN 60947 test cycle O-t-CO-t-CO [Ics]500 V DC [I_{cs}]
30 kA
Rated short-circuit breaking capacity I_{cn} [I_{cn}]Ics to IEC/EN 60947 test cycle O-t-CO-t-CO [Ics]750 V DC [I_{cs}]
30 kA
Terminal capacity
Accessories required
NZM3-XSVS
Optional accessories
Box terminal
Tunnel terminal
connection on rear
Cu strip (number of segments x width x segment thickness)Bolt terminal and rear-side connectionFlat copper strip, with holes [min.]
6 x 16 x 0.8 mm
Cu strip (number of segments x width x segment thickness)Bolt terminal and rear-side connectionFlat copper strip, with holes [max.]
10 x 32 x 1.0 + 5 x 32 x 1.0 mm
Cu strip (number of segments x width x segment thickness)Bolt terminal and rear-side connectionConnection width extension
(2 x) 10 x 50 x 1.0 mm
Copper busbar (width x thickness) [mm]Bolt terminal and rear-side connectionDirect on the switch [max.]
30 x 10
+ 30 x 5 mm

Design verification as per IEC/EN 61439

Technical data for design verification
Equipment heat dissipation, current-dependent [P_{vid}]
94 W
Operating ambient temperature min.
-25 °C
Operating ambient temperature max.
+70 °C
IEC/EN 61439 design verification
10.2 Strength of materials and parts10.2.2 Corrosion resistance
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.3.1 Verification of thermal stability of enclosures
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heat
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.4 Resistance to ultra-violet (UV) radiation
Meets the product standard's requirements.
10.2 Strength of materials and parts10.2.5 Lifting
Does not apply, since the entire switchgear needs to be evaluated.
10.2 Strength of materials and parts10.2.6 Mechanical impact
Does not apply, since the entire switchgear needs to be evaluated.
10.2 Strength of materials and parts10.2.7 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 Insulation properties10.9.2 Power-frequency electric strength
Is the panel builder's responsibility.
10.9 Insulation properties10.9.3 Impulse withstand voltage
Is the panel builder's responsibility.
10.9 Insulation properties10.9.4 Testing of enclosures made of insulating material
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.
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.

Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss10.0.1-27-37-04-09 [AJZ716013])
Rated permanent current Iu
320 A
Rated voltage
690 - 690 V
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz
50 kA
Overload release current setting
250 - 320 A
Adjustment range short-term delayed short-circuit release
0 - 0 A
Adjustment range undelayed short-circuit release
6 - 10 A
Integrated earth fault protection
No
Type of electrical connection of main circuit
Screw connection
Device construction
Built-in device plug-in technique
Suitable for DIN rail (top hat rail) mounting
No
DIN rail (top hat rail) mounting optional
No
Number of auxiliary contacts as normally closed contact
0
Number of auxiliary contacts as normally open contact
0
Number of auxiliary contacts as change-over contact
0
With switched-off indicator
No
With under voltage release
No
Number of poles
4
Position of connection for main current circuit
Front side
Type of control element
Rocker lever
Complete device with protection unit
Yes
Motor drive integrated

No
Motor drive optional
Yes
Degree of protection (IP)
IP20

CAD data

- Product-specific CAD data
  (Web)
- 3D Preview
  (Web)

DWG files

- DA-CD-nzmn3_4_a320_sve
  File
  (Web)

edz files

- DA-CE-ETN.NZMN3-4-A320-SVE
  File
  (Web)

Step files

- DA-CS-nzmn3_4_a320_sve
  File
  (Web)

Additional product information

- additional technical information for NZM power switch
  (PDF)

Product photo

- 
  1230PIC-1320
  Photo

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