



- German
- English
- Spanish
- French
- Dutch
- Italian
- Polish
- Czech
- Russian
- Norwegian Bokmål

Worldwide English



NZMN3-4-A500-SVE - Circuit-breaker, 4p, 500A, withdrawable unit



168512 NZMN3-4-A500-SVE

[Overview](#) [Specifications](#) [Resources](#)

168512 NZMN3-4-A500-SVE

Circuit-breaker, 4p, 500A, withdrawable unit

Alternate Catalog No.

EL-Nummer (Norway)

NZMN3-4-A500-SVE

4357597

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 I_r 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 [$I_h = I_p$]Rated current = rated uninterrupted current [$I_h = I_p$]

500 A

Neutral conductor [% of phase conductor]

100 %

Setting range

Overload tripMain pole [I_r]

400 - 500 A

Short-circuit releases [I_{rm}] Non-delayed [$I_r = I_h \times \dots$]

6 - 10

Technical data

General

Ambient temperatureAmbient temperature, storage

- 40 - + 70 °C

Ambient temperatureOperation

-25 - +70 °C

Circuit-breakers

Rated current = rated uninterrupted current [$I_h = I_p$]

500 A

Switching capacity
 Rated short-circuit breaking capacity I_{cn} [I_{cn}] Icu to IEC/EN 60947 test cycle O-t-OO [I_{cu}] 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-OO [I_{cu}] 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-OO [I_{cu}] 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-OO-t-OO [I_{cs}] 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-OO-t-OO [I_{cs}] 750 V DC [I_{cs}]
 30 kA

Design verification as per IEC/EN 61439

Technical data for design verification
 Equipment heat dissipation, current-dependent [P_{id}]
 130.5 W
 Operating ambient temperature min.
 -25 °C
 Operating ambient temperature max.
 +70 °C
 IEC/EN 61439 design verification
 10.2 Strength of materials and parts 10.2.2 Corrosion resistance
 Meets the product standard's requirements.
 10.2 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures
 Meets the product standard's requirements.
 10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat
 Meets the product standard's requirements.
 10.2 Strength of materials and parts 10.2.3.3 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 parts 10.2.4 Resistance to ultra-violet (UV) radiation
 Meets the product standard's requirements.
 10.2 Strength of materials and parts 10.2.5 Lifting
 Does not apply, since the entire switchgear needs to be evaluated.
 10.2 Strength of materials and parts 10.2.6 Mechanical impact
 Does not apply, since the entire switchgear needs to be evaluated.
 10.2 Strength of materials and parts 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 Insulation properties 10.9.2 Power-frequency electric strength
 Is the panel builder's responsibility.
 10.9 Insulation properties 10.9.3 Impulse withstand voltage
 Is the panel builder's responsibility.
 10.9 Insulation properties 10.9.4 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

(EO000228)

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 I_{u}
500 A

Rated voltage
690 - 690 V

Rated short-circuit breaking capacity I_{cu} at 400 V, 50 Hz
50 kA

Overload release current setting
400 - 500 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
Nb

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
Nb

DIN rail (top hat rail) mounting optional
Nb

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
Nb

With under voltage release
Nb

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-nzrm3_4_a320_sve File \(Web\)](#)

edz files

- [DA-CE-ETN.NZMN3-4-A500-SVE File \(Web\)](#)

Step files

- [DA-CS-nzm3_4_a320_sve](#)
File
(Web)

Additional product information

- [additional technical information for NZMpower switch](#)
(PDF)

Product photo



1230PIC-1320
Photo

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