



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

Worldwide English

**EATON**

Powering Business Worldwide

NZM3-A500-SVE - Circuit-breaker, 3p, 500A, withdrawable unit



168915 NZM3-A500-SVE

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

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

168915 NZM3-A500-SVE

Circuit-breaker, 3p, 500A, withdrawable unit

Alternate Catalog No.

NZM3-A500-SVE

EL-Nummer (Norway)

4357628

Series NZM circuit-breakers cover all application cases with just four compact sizes and are suitable for the IEC market. Installation is always flexible thanks to the use of modular function groups.

Delivery program

Switching capacity

400/415 V 50 Hz [I_{cu}]

150 kA

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

500 A

Setting rangeOverload trip [I_r]

400 - 500 A

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

6 - 10

Technical data

General

Ambient temperatureAmbient temperature, storage

- 40 - + 70 °C

Ambient temperatureOperation

-25 - +70 °C

Circuit-breakers

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

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}]
 150 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}]
 70 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}]
 70 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}]
 70 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}]
 70 kA

Design verification as per IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [I_h]

500 A

Equipment heat dissipation, current-dependent [P_{id}]

93 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 L111111.0

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EG000228)
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
150 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
3000 - 5000 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
3
Position of connection for main current circuit
Front side
Type of control element
Rocker lever
Complete device with protection unit
Yes
Motor drive integrated
Nb
Motor drive optional
Yes
Degree of protection (IP)
IP20

CAD data

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

DWG files

- DA-CD-nznh3_me220_sve
File
(Web)

edz files

- DA-CE-ETNNZMH3-A500-SVE

Step files

- [DA-CS-nznh3_me220_sve](#)
File
(Web)

Additional product information

- additional technical information for NZM power switch
(PDF)

Product photo

- 
1230PC-1322
Photo

Download-Center

- [Download-Center \(this item\)](#)
Eaton EMEA Download-Center - download data for this item
- [Download-Center](#)
Eaton EMEA Download-Center



[Generate data sheet in PDF format](#)



[Generate data sheet in Excel format](#)



[Write a comment](#)

[Imprint](#) [Privacy Policy](#) [Legal Disclaimer](#) [Terms and Conditions](#)

© 2022 by Eaton Industries GmbH