



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

Part no.	NZMN3-4-A500-SVE		
Catalog No.	168512		
Alternate Catalog No.	NZMN3-4-A500-SVE		
EL-Nummer (Norway)	4357597		

Similar to illustration

## Delivery program

## Switching capacity

400/415 V 50 Hz	$I_{cu}$	kA	50
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## Rated current = rated uninterrupted current

Rated current = rated uninterrupted current	$I_n = I_u$	A	500
Neutral conductor	% of phase conductor	%	100

## Setting range

Overload trip	$I_r$	A	400 - 500
Main pole			
Short-circuit releases			
Non-delayed	$I_i = I_n \times \dots$		6 - 10

## Technical data

## General

Ambient temperature	$I_{cu}$	kA	
Ambient temperature, storage		°C	-40 - +70
Operation		°C	-25 - +70

## Circuit-breakers

Rated current = rated uninterrupted current	$I_n = I_u$	A	500
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## Switching capacity

Rated short-circuit breaking capacity $I_{cn}$	$I_{cn}$		
Icu to IEC/EN 60947 test cycle 0-t-CO	$I_{cu}$	kA	
400/415 V 50/60 Hz	$I_{cu}$	kA	50
500 V DC	$I_{cu}$	kA	30
750 V DC	$I_{cu}$	kA	30
Ics to IEC/EN 60947 test cycle 0-t-CO-t-CO	$I_{cs}$	kA	
500 V DC	$I_{cs}$	kA	30
750 V DC	$I_{cs}$	kA	30

## Design verification as per IEC/EN 61439

Technical data for design verification	$P_{vid}$	W	130.5
Equipment heat dissipation, current-dependent		°C	-25
Operating ambient temperature min.		°C	70
Operating ambient temperature max.		°C	
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties		
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.
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 $I_{\text{u}}$	A	500
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity $I_{\text{cu}}$ at 400 V, 50 Hz	kA	50
Overload release current setting	A	400 - 500
Adjustment range short-term delayed short-circuit release	A	0 - 0
Adjustment range undelayed short-circuit release	A	6 - 10
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

## Additional product information (links)

additional technical information for NZM power switch

[https://es-assets.eaton.com/DOCUMENTATION/PDF/nzm\\_technic\\_de\\_en.pdf](https://es-assets.eaton.com/DOCUMENTATION/PDF/nzm_technic_de_en.pdf)