## DATASHEET - NZMH3-4-A500/320-SVE



Circuit-breaker, 4p, 500A, 320A in 4th pole, withdrawable unit

Powering Business Worldwide\*

Part no. NZMH3-4-A500/320-SVE

Catalog No. 168894

Alternate Catalog NZMH3-4-A500R-SVE

No.

EL-Nummer (Norway)

0004357617

Similar to illustration

Delivery program			
Protective function			System and cable protection
Standard/Approval			IEC
Switching capacity			
400/415 V 50 Hz	I <sub>cu</sub>	kA	150
Rated current = rated uninterrupted current			
Rated current = rated uninterrupted current	$I_n = I_u$	Α	500
Neutral conductor	% of phase conductor	%	60
Setting range			
Overload trip			
中	I <sub>r</sub>	Α	400 - 500
Main pole	I <sub>r</sub>	A	250 - 320

#### **Technical data**

Short-circuit releases

Non-delayed

1>

#### General

Ambient temperature			
Ambient temperature, storage		°C	- 40 - + 70
Operation		°C	-25 - +70
Circuit-breakers			
Rated current = rated uninterrupted current	$I_n = I_u$	Α	500
Switching capacity			
Rated short-circuit breaking capacity I <sub>cn</sub>	I <sub>cn</sub>		
Icu to IEC/EN 60947 test cycle 0-t-C0	lcu	kA	
400/415 V 50/60 Hz	I <sub>cu</sub>	kA	150
Ics to IEC/EN 60947 test cycle 0-t-C0-t-C0	Ics	kA	
500 V DC	I <sub>cs</sub>	kA	70
750 V DC	I <sub>cs</sub>	kA	70

 $I_i = I_n \times \dots$ 

6 - 10

## **Design verification as per IEC/EN 61439**

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	500
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	130.5
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70

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 (eci@ss10.0.1-27-37-04-09 [AJZ716013])

protection (ecl@ss10.0.1-27-37-04-09 [AJZ716013])		
Rated permanent current lu	А	500
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	150
Overload release current setting	А	400 - 500
Adjustment range short-term delayed short-circuit release	Α	0 - 0
Adjustment range undelayed short-circuit release	А	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

 $https://es-assets.eaton.com/DOCUMENTATION/PDF/nzm\_technic\_de\_en.pdf$