## **DATASHEET - NZMH3-A500-SVE**

Part no. Catalog No.

**EL-Nummer** 

(Norway)

No.



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

NZMH3-A500-SVE 168915 Alternate Catalog NZMH3-A500-SVE

0004357628



Similar to illustration

#### **Delivery program**

Dontory program			
Switching capacity			
400/415 V 50 Hz	l <sub>cu</sub>	kA	150
Rated current = rated uninterrupted current			
Rated current = rated uninterrupted current	$I_n = I_u$	А	500
Setting range			
Overload trip			
L	I <sub>r</sub>	A	400 - 500
Short-circuit releases			
Non-delayed	l <sub>i</sub> = l <sub>n</sub> x		6 - 10

### **Technical data**

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

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	500
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	93
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 (ecl@ss10.0.1-27-37-04-09 [AJZ716013])

And voltage     Image: Note of the service of	protection (ect@ss10.0.1-27-37-04-09 [AJZ710015])		
Add short-circuit breaking capacity lou at 400 V, 50 Hz     Image: heat short-circuit release     Image: heat short-circuit release       Deveload release current setting     A     400-500       Adjustment range short-circuit release     A     0.0       Adjustment range undelayed short-circuit release     A     3000-5000       Adjustment range undelayed short-circuit release     A     3000-5000       Adjustment range undelayed short-circuit release     Mo     Screw connection       Statust for DIN rail (top hat rail) mounting optional     Mo     Screw connection       DIN rail (top hat rail) mounting optional     Mo     No       Number of auxiliary contacts as normally closed contact     Mo     No       Number of auxiliary contacts as normally closed contact     Mo     No       Number of auxiliary contacts as normally closed contact     Mo     No       Number of poles     Mo     No     No       Number of auxiliary contacts as normality closed contact     Mo     No     No       Number of poles     No     No     No     No       Number of poles     Fort side     No     No     No     No     No <td>Rated permanent current lu</td> <td>A</td> <td>500</td>	Rated permanent current lu	A	500
Autor or release current setting     A     A     0     500       Adjustment range short-term delayed short-circuit release     A     0	Rated voltage	V	690 - 690
Adjustment range short-terr delayed short-circuit release  Adjustment range undelayed short-circuit release  Adjust release	Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	150
Adjustment range undelayed short-circuit release     A     S000-5000       httpsrade arth fault protection     No     Screw connection       Spee of electrical connection of main circuit     Screw connection     Screw connection       Suitable for DIN rail (top hat rail) mounting optional     Mo     Screw connection       Number of auxiliary contacts as normally closed contact     Mo     Screw connection       Number of auxiliary contacts as normally contact     Mo     Screw connection       Nith switched-off indicator     Mo     Screw connection       Number of poles     Mo     Screw connection       Spector of poles     Screw connection formain current circuit     Screw connection       Spector of poles     Screw connection formain current circuit     Screw connection       Spector of poles     Screw connection formain current circuit     Screw connection       Spector of poles     Screw connection formain current circuit     Screw connection       Spector of poles     Screw connection formain current circuit     Screw connection formain current circuit       Spector of pole     Screw connection formain current circuit     Screw connection formain current circuit       Spector of pole     Screw connection	Overload release current setting	А	400 - 500
Integrated earth fault protection   No     Syne of electrical connection of main circuit   Screw connection     Device construction   Built-in device plug-in technique     Suitable for DIN rail (top hat rail) mounting   Screw connection     DIN rail (top hat rail) mounting optional   Screw connection     Number of auxiliary contacts as normally closed contact   No     Number of auxiliary contacts as change-over contact   Screw connection     With under voltage release   Screw connection     Nyne of connection for main current circuit   Screw connection     Specific control element   Screw connection     Specific control element   Screw connection     Complete device with protection unit   Screw connection     Motor drive integrated   Screw connection     Wotor drive integrated   Screw connection     Screw connection formain   Screw connection     Screw connection   Screw connection     Screw connect	Adjustment range short-term delayed short-circuit release	А	0 - 0
Type of electrical connection of main circuit     Connection     Serve 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     No       Number of auxiliary contacts as normally copen contact     No       Number of auxiliary contacts as change-over contact     No       With switched-off indicator     No       Number of plos     No       Position of connection for main current circuit     No       Number of connection for main current circuit     No       Number of device plug-in technique     No       Number of auxiliary contacts as change-over contact     No       Number of plos     No       Number of plos     No       Number of plos     Server Ser	Adjustment range undelayed short-circuit release	A	3000 - 5000
Device construction     Image: Construction     Built-in device plug-in technique       Device construction     Solidable for DIN rail (top hat rail) mounting     Solidable for DIN rail (top hat rail) mounting optional     Solidable for DIN rail (to	Integrated earth fault protection		No
Suitable for DIN rail (top hat rail) mounting     Image: Constraint of the constrain	Type of electrical connection of main circuit		Screw connection
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 normally open contact     0       Number of auxiliary contacts as change-over contact     0       Number of auxiliary contacts as change-over contact     0       Nith under voltage release     No       Number of poles     3       Position of connection for main current circuit     Image: Sector S	Device construction		Built-in device plug-in technique
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     Number of auxiliary contacts as change-over contact   0     Number of auxiliary contacts as change-over contact   0     Nith switched-off indicator   0     Number of poles   No     Position of connection for main current circuit   0     Type of control element   6     Complete device with protection unit   6     Mutor drive integrated   6     Notor drive integrated   6     Notor drive optional   6	Suitable for DIN rail (top hat rail) mounting		No
Number of auxiliary contacts as normally open contact   0     Number of auxiliary contacts as change-over contact   0     Nith switched-off indicator   No     Nith under voltage release   No     Number of poles   3     Position of connection for main current circuit   Foot side     Rype of control element   Keker lever     Complete device with protection unit   Yes     Notor drive integrated   No     Notor drive optional   Yes	DIN rail (top hat rail) mounting optional		No
Number of auxiliary contacts as change-over contact     O       With switched-off indicator     No       With under voltage release     No       Number of poles     3       Position of connection for main current circuit     Font side       Type of control element     Rocker lever       Complete device with protection unit     Yes       Motor drive integrated     Yes	Number of auxiliary contacts as normally closed contact		0
With switched-off indicator   No     With under voltage release   No     Number of poles   S     Position of connection for main current circuit   Front side     If ype of control element   Rocker lever     Complete device with protection unit   Yes     Notor drive integrated   No     Yes   Yes	Number of auxiliary contacts as normally open contact		0
With under voltage releaseNoNumber of poles3Position of connection for main current circuitFont sideType of control elementRocker leverComplete device with protection unitYesNotor drive integratedNoYet of trive optionalYes	Number of auxiliary contacts as change-over contact		0
Number of poles   3     Position of connection for main current circuit   Front side     Fype of control element   Rocker lever     Complete device with protection unit   Yes     Motor drive integrated   No     Yes   Yes	With switched-off indicator		No
Position of connection for main current circuit Formatic Control element Formatic Complete device with protection unit Formatic Complete device With Protection	With under voltage release		No
Type of control element Rocker lever   Complete device with protection unit Yes   Motor drive integrated No   Yes Yes	Number of poles		3
Complete device with protection unit Model Yes   Motor drive integrated Model No   Motor drive optional Model Yes	Position of connection for main current circuit		Front side
Motor drive optional Motor drive aptional	Type of control element		Rocker lever
Motor drive optional Yes	Complete device with protection unit		Yes
	Motor drive integrated		No
Degree of protection (IP)	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