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NZMH3-4-A400/250-SVE - Circuit-breaker, 4p, 400A, 250A in 4th pole, withdrawable unit



168892 NZMH3-4-A400/250-SVE

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## Delivery program

Protective function

System and cable protection

Standard/Approval

IEC

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 [ $I_h = I_u$ ]

400 A

Neutral conductor [% of phase conductor]

60 %

### Setting range

Overload trip [ $I_r$ ]

320 - 400 A

Overload trip Main pole [ $I_r$ ]

200 - 250 A

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

6 - 10

## Technical data

### General

Ambient temperature Ambient temperature, storage

- 40 - + 70 °C  
 Ambient temperatureOperation  
 -25 - +70 °C  
 Circuit-breakers  
 Rated current = rated uninterrupted current [ $I_n = I_u$ ]  
 400 A  
 Switching capacity  
 Rated short-circuit breaking capacity  $I_{cn}$  [ $I_{cn}$ ]  $I_{cu}$  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  $I_{cn}$  [ $I_{cn}$ ]  $I_{cs}$  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  $I_{cn}$  [ $I_{cn}$ ]  $I_{cs}$  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 [ $I_h$ ]  
 400 A  
 Equipment heat dissipation, current-dependent [ $P_{vd}$ ]  
 96.48 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

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  $I_{\text{u}}$   
400 A  
Rated voltage  
690 - 690 V  
Rated short-circuit breaking capacity  $I_{\text{cu}}$  at 400 V, 50 Hz  
150 kA  
Overload release current setting  
320 - 400 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  
No  
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  
Nb  
Motor drive optional  
Yes  
Degree of protection (IP)  
IP20

## CAD data

- [Product-specific CAD data \(Web\)](#)
- [3D Preview \(Web\)](#)

## DWG files

- [DA-CD-nzm3\\_4\\_a320\\_sve File \(Web\)](#)

## edz files

- [DA-CE-ETN NZM3-4-A400\\_250-SVE](#)  
File  
(Web)

## Step files

- [DA-CS-nzrm3\\_4\\_a320\\_sve](#)  
File  
(Web)

## Additional product information

- additional technical information for NZMpower switch  
(PDF)

## Product photo



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