







Circuit-breaker, 4p, 320A, 200A in 4th pole, withdrawable unit

Part no. **NZMH3-4-A320/200-SVE**  
 Catalog No. **168890**  
 Alternate Catalog No. **NZMH3-4-A320R-SVE**  
 EL-Nummer (Norway) **0004357613**

Similar to illustration

## Delivery program

|   |                          |    |                             |
|---|--------------------------|----|-----------------------------|
| Protective function   |                          |    | System and cable protection |
| Standard/Approval   |                          |    | IEC                         |
| <b>Switching capacity</b>   |                          |    |                             |
| 400/415 V 50 Hz   | $I_{cu}$                 | kA | 150                         |
| <b>Rated current = rated uninterrupted current</b>                                  |                          |    |                             |
| Rated current = rated uninterrupted current   | $I_n = I_u$              | A  | 320                         |
| Neutral conductor   | % of phase conductor     | %  | 60                          |
| <b>Setting range</b>  |                          |    |                             |
| Overload trip   |                          |    |                             |
|    | $I_r$                    | A  | 250 - 320                   |
| Main pole   | $I_r$                    | A  | 160 - 200                   |
|   |                          |    |                             |
| Short-circuit releases  |                          |    |                             |
|  |                          |    |                             |
| Non-delayed   | $I_i = I_n \times \dots$ |    | 6 - 10                      |
|  |                          |    |                             |

## Technical data

### General

|                              |  |    |             |
|------------------------------|--|----|-------------|
| Ambient temperature          |  |    |             |
| Ambient temperature, storage |  | °C | - 40 - + 70 |
| Operation                    |  | °C | -25 - +70   |

### Circuit-breakers

|   |             |   |     |
|---|-------------|---|-----|
| Rated current = rated uninterrupted current | $I_n = I_u$ | A | 320 |
|---|-------------|---|-----|

### Switching capacity

|   |          |    |     |
|---|----------|----|-----|
| Rated short-circuit breaking capacity $I_{cn}$  | $I_{cn}$ |    |     |
| $I_{cu}$ to IEC/EN 60947 test cycle O-t-CO      | $I_{cu}$ | kA |     |
| 400/415 V 50/60 Hz                              | $I_{cu}$ | kA | 150 |
| $I_{cs}$ to IEC/EN 60947 test cycle O-t-CO-t-CO | $I_{cs}$ | kA |     |
| 500 V DC  | $I_{cs}$ | kA | 70  |
| 750 V DC  | $I_{cs}$ | kA | 70  |

## Design verification as per IEC/EN 61439

|  |           |    |     |
|--|-----------|----|-----|
| Technical data for design verification                   |           |    |     |
| Rated operational current for specified heat dissipation | $I_n$     | A  | 320 |
| Equipment heat dissipation, current-dependent            | $P_{vid}$ | W  | 94  |
| 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]) |    |  |                                   |
| Rated permanent current I <sub>u</sub>  | A  |  | 320                               |
| Rated voltage   | V  |  | 690 - 690                         |
| Rated short-circuit breaking capacity I <sub>cu</sub> at 400 V, 50 Hz   | kA |  | 150                               |
| Overload release current setting  | A  |  | 250 - 320                         |
| 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)