### DATASHEET - NZMN3-4-A320/200-SVE



Circuit-breaker, 4p, 320A, 200A in 4th pole, plug-in module

Powering Business Worldwide

Part no. NZMN3-4-A320/200-SVE 168509

Catalog No.

**Alternate Catalog** NZMN3-4-A320R-SVE

No.

**EL-Nummer** (Norway)

4357594

Similar to illustration

| Delivery program                            |                      |    |           |
|---|----------------------|----|-----------|
| Switching capacity                          |                      |    |           |
| 400/415 V 50 Hz                             | I <sub>cu</sub>      | kA | 50        |
| Rated current = rated uninterrupted current |                      |    |           |
| Rated current = rated uninterrupted current | $I_n = I_u$          | Α  | 320       |
| Neutral conductor                           | % of phase conductor | %  | 60        |
| Setting range                               |                      |    |           |
| Overload trip                               |                      |    |           |
| Main pole                                   | l <sub>r</sub>       | Α  | 160 - 200 |
| Short-circuit releases                      |                      |    |           |
| Non-delayed                                 | $I_i = I_n x \dots$  |    | 6 - 10    |

#### **Technical data**

Accessories required

Optional accessories

Cu strip (number of segments x width x segment thickness)

Bolt terminal and rear-side connection

Flat copper strip, with holes

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  | 320         |
| Use in unearthed supply systems                         |                 | V  | ≦ 690       |
| Switching capacity                                      |                 |    |             |
| Rated short-circuit making capacity                     | I <sub>cm</sub> |    |             |
| 240 V   | I <sub>cm</sub> | kA | 330         |
| Rated short-circuit breaking capacity $\mathbf{I}_{cn}$ | 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 | 50          |
| 500 V DC  | I <sub>cu</sub> | kA | 30          |
| 750 V DC  | I <sub>cu</sub> | kA | 30          |
| Ics to IEC/EN 60947 test cycle 0-t-C0-t-C0              | Ics             | kA |             |
| 500 V DC  | I <sub>cs</sub> | kA | 30          |
| 750 V DC  | Ics             | kA | 30          |
| Terminal capacity                                       |                 |    |             |

mm

min.

NZM3-XSVS

Box terminal Tunnel terminal connection on rear

6 x 16 x 0.8

| Flat copper strip, with holes          | max. | mm | 10 x 32 x 1.0 + 5 x 32 x 1.0 |
|--|------|----|------------------------------|
| Connection width extension             |      | mm | (2 x) 10 x 50 x 1.0          |
| Copper busbar (width x thickness)      | mm   |    |                              |
| Bolt terminal and rear-side connection |      |    |                              |
| Direct on the switch                   |      |    |                              |
|  | max. | mm | 30 x 10<br>+ 30 x 5          |

# Design verification as per IEC/EN 61439

| Technical data for design verification   |                  |    |  |
|--|------------------|----|--|
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub> | 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 switch<br>gear must be observed. $\label{eq:constraint}$       |
| 10.12 Electromagnetic compatibility  |                  |    | Is the panel builder's responsibility. The specifications for the switch<br>gear must be observed. $\label{eq:constraint}$       |
| 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 lu                                | А  |   | 320                               |
|---|----|---|-----------------------------------|
| Rated voltage   | V  |   | 690 - 690                         |
| Rated short-circuit breaking capacity Icu at 400 V, 50 Hz | kA | Д | 50                                |
| Overload release current setting                          | А  |   | 250 - 320                         |
| Adjustment range short-term delayed short-circuit release | А  |   | 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 |
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