## DATASHEET - NZMS1-A25-SVE

Circuit breaker 3-pole 25A, system/cable protection, withdrawable unit



Part no. NZMS1-A25-SVE Catalog No. 112781

#### Similar to illustration

| Delivery program                            |                                   |    |             |
|---|-----------------------------------|----|-------------|
| Switching capacity                          |                                   |    |             |
| 400/415 V 50 Hz                             | l <sub>cu</sub>                   | kA | 70          |
| Rated current = rated uninterrupted current |                                   |    |             |
| Rated current = rated uninterrupted current | $I_n = I_u$                       | А  | 25          |
| Setting range                               |                                   |    |             |
| Overload trip                               |                                   |    |             |
| c<br>ţ                                      | l <sub>r</sub>                    | A  | 20 - 25     |
| Short-circuit releases                      |                                   |    |             |
| Non-delayed                                 | I <sub>i</sub> = I <sub>n</sub> x |    | 350 A fixed |

### Technical data

| General   |                 |    |             |
|---|-----------------|----|-------------|
| Ambient temperature                                   |                 |    |             |
| Ambient temperature, storage                          |                 | °C | - 40 - + 70 |
| Operation   |                 | °C | -25 - +70   |
| Circuit-breakers                                      |                 |    |             |
| Rated current = rated uninterrupted current           | $I_n = I_u$     | Α  | 25          |
| 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 | 70          |

# Design verification as per IEC/EN 61439

| Technical data for design verification   |                  |    |  |
|--|------------------|----|--|
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub> | W  | 8.78   |
| 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 lu                                | А  | 25                                |
|---|----|-----------------------------------|
| Rated voltage   | V  | 690 - 690                         |
| Rated short-circuit breaking capacity Icu at 400 V, 50 Hz | kA | 70                                |
| Overload release current setting                          | А  | 20 - 25                           |
| Adjustment range short-term delayed short-circuit release | А  | 0 - 0                             |
| Adjustment range undelayed short-circuit release          | А  | 350 - 350                         |
| Integrated earth fault protection                         |    | No                                |
| Type of electrical connection of main circuit             |    | Frame clamp                       |
| 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   |    | 3                                 |
| Position of connection for main current circuit           |    | Back side                         |
| Type of control element                                   |    | Rocker lever                      |
| Complete device with protection unit                      |    | Yes                               |
| Motor drive integrated                                    |    | No                                |
| Motor drive optional                                      |    | No                                |
| 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