## DATASHEET - NZM2/3-XUHIV18DC-PI



Undervoltage release for NZM2/3, 1 early-make auxiliary contact, 2NO, 18DC, Push-in terminals

Powering Business Worldwide\*

Part no. NZM2/3-XUHIV18DC-PI Catalog No. 189780

Similar to illustration

**Delivery program** 

| Donvory program       |                |   |  |
|-----------------------|----------------|---|--|
| Product range         |                |   | Accessories  |
| Accessories           |                |   | Undervoltage release   |
| Accessories           |                |   | Undervoltage release with early-make auxiliary contact   |
| Standard/Approval     |                |   | UL/CSA, IEC  |
| Description           |                |   | For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications.  Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below 35 - 70% Us.  For use with emergency-stop devices in connection with an emergency-stop button.  When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on.  Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4).  Undervoltage release modules cannot be installed simultaneously with early-make contact NZMXHIV, shunt release NZMXA or relais modules NZMX2A |
| Connection type       |                |   | with push in terminal  |
| Auxiliary contacts    |                |   | with early-make auxiliary contact  |
| Rated control voltage | U <sub>s</sub> | V | 18 V DC  |
| For use with          |                |   | NZM2(-4), N(S)2(-4)<br>NZM3(-4), N(S)3(-4)   |

## Technical data Undervoltage release

| ondorronago rorodoo   |         |   |         |
|-----------------------|---------|---|---------|
| Rated control voltage | $U_s$   | V |         |
| Rated control voltage | $U_{s}$ | V | 18 V DC |

## Design verification as per IEC/EN 61439

| 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) / Under voltage coil (EC001022)   |   |                         |  |  |
|--|---|-------------------------|--|--|
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Undervoltage trip (ecl@ss10.0.1-27-37-04-17 [AKF015013]) |   |                         |  |  |
| Rated control supply voltage Us at AC 50HZ   | V | 0 - 0                   |  |  |
| Rated control supply voltage Us at AC 60HZ   | V | 0 - 0                   |  |  |
| Rated control supply voltage Us at DC  | V | 18 - 18                 |  |  |
| Voltage type for actuating   |   | DC                      |  |  |
| Type of electric connection  |   | Spring clamp connection |  |  |
| Number of contacts as normally open contact  |   | 1                       |  |  |
| Number of contacts as normally closed contact  |   | 0                       |  |  |
| Number of contacts as change-over contact  |   | 0                       |  |  |
| Delayed  |   | No                      |  |  |
| Suitable for power circuit breaker   |   | Yes                     |  |  |
| Suitable for off-load switch   |   | Yes                     |  |  |
| Suitable for motor safety switch   |   | Yes                     |  |  |
| Suitable for overload relay  |   | No                      |  |  |
|  |   |                         |  |  |