## **DATASHEET - NZM4-XU110-130AC**



Undervoltage release, 110-130VAC

Part no. NZM4-XU110-130AC Catalog No. 266192



Similar to illustration

**Delivery program** 

| Delivery program      |         |   |  |
|-----------------------|---------|---|--|
| Product range         |         |   | Accessories  |
| Accessories           |         |   | Undervoltage release   |
| Accessories           |         |   | Undervoltage releases  |
| Standard/Approval     |         |   | UL/CSA, IEC  |
| Construction size     |         |   | NZM4   |
| Description           |         |   | Non-delayed disconnection of NZM circuit-breaker or N switch-disconnector when the control voltage sinks below 35 – 70% U <sub>S</sub> .  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.  Undervoltage releases cannot be installed simultaneously with NZMXHIV early-make auxiliary contact or NZMXA shunt release. |
| Connection type       |         |   | With bolt connection   |
| Auxiliary contacts    |         |   | without auxiliary contact  |
| Rated control voltage | $U_{s}$ | V | 110 - 130 V 50/60 Hz   |
| For use with          |         |   | NZM4(-4), N(S)4(-4)  |

# Technical data Undervoltage release

| Oliueivoltage release  |       |                 |                                      |
|--|-------|-----------------|--------------------------------------|
| Rated control voltage  | $U_s$ | V               |                                      |
| AC   | $U_s$ | V AC            | 110 - 130                            |
| Rated control voltage  | $U_s$ | V               | 110 - 130 V 50/60 Hz                 |
| Operating range  |       |                 |                                      |
| Drop-out voltage   |       | $x  U_s$        | 0.35 - 0.7                           |
| Pick-up voltage  | x Uc  |                 | 0.85 - 1.1                           |
| Power consumption  |       |                 |                                      |
| AC   |       |                 |                                      |
| Pick-up AC   |       | VA              | 3.6                                  |
| Sealing AC   |       | VA              | 3.6                                  |
| DC   |       | $x U_s$         |                                      |
| Pick-up DC   |       | W               | 2.5                                  |
| Sealing DC   |       | W               | 2.5                                  |
| Maximum opening delay (response time until opening of the main contacts) |       | ms              | 23                                   |
| Minimum command time   |       | ms              | 10 15                                |
| Terminal capacities  |       |                 |                                      |
| Solid or flexible conductor, with ferrule                                |       | mm <sup>2</sup> | 1 x (0,75 - 2,5)<br>2 x (0,75 - 2,5) |
|  |       | AWG             | 1 x (18 14)<br>2 x (18 14)           |

## 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 lobserved.                                     |
| 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 | V 110 - 130      |  |
| Rated control supply voltage Us at AC 60HZ   | V | V 110 - 130      |  |
| Rated control supply voltage Us at DC  | V | V 0-0            |  |
| Voltage type for actuating   |   | AC               |  |
| Type of electric connection  |   | Screw connection |  |
| Number of contacts as normally open contact  |   | 0                |  |
| 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   |   | No               |  |
| Suitable for overload relay  |   | No               |  |

# **Approvals**

| • •                         |   |
|-----------------------------|---|
| Product Standards           | UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking |
| UL File No.                 | E140305   |
| UL Category Control No.     | DIHS  |
| CSA File No.                | 022086  |
| CSA Class No.               | 1437-01   |
| North America Certification | UL listed, CSA certified                        |

## **Additional product information (links)**

IL01210005Z (AWA1230-2027) Shunt release, Undervoltage release, Early-make auxiliary contact

IL01210005Z (AWA1230-2027) Shunt release, Undervoltage release, Early-make auxiliary contact  $ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL01210005Z2010\_10.pdf$