



**Undervoltage release, 60 V DC**

**Part no. NZM2/3-XU60DC**  
**Catalog No. 259513**

Similar to illustration

## Delivery program

|                       |       |   |   |
|-----------------------|-------|---|---|
| Product range         |       |   | Accessories   |
| Accessories           |       |   | Undervoltage release  |
| Accessories           |       |   | Undervoltage releases   |
| Standard/Approval     |       |   | UL/CSA, IEC   |
| Construction size     |       |   | NZM2/3  |
| Description           |       |   | Non-delayed disconnection of NZM circuit-breaker or N switch-disconnector when the control voltage sinks below 35 – 70% $U_s$ .<br>For use with emergency-stop devices in connection with an emergency-stop button.<br>When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on.<br>Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release. |
| Connection type       |       |   | With bolt connection  |
| Auxiliary contacts    |       |   | without auxiliary contact   |
| Rated control voltage | $U_s$ | V | 60 V DC   |
| For use with          |       |   | NZM2(-4), N2(-4)<br>NZM3(-4), N3(-4)  |

## Technical data

### Undervoltage release

|                       |       |   |         |
|-----------------------|-------|---|---------|
| Rated control voltage | $U_s$ | V |         |
| Rated control voltage | $U_s$ | V | 60 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 | 60 - 60          |
| Voltage type for actuating   |  |   | DC               |
| 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                        |