

**Shunt release, 48VAC/DC**

**Part no. NZM2/3-XA48AC/DC**  
**Article no. 259756**



Similar to illustration

**Delivery program**

|                       |       |   |   |
|-----------------------|-------|---|---|
| Product range         |       |   | Accessories   |
| Accessories           |       |   | Shunt release   |
| Accessories           |       |   | Shunt releases  |
| Standard/Approval     |       |   | UL/CSA, IEC   |
| Construction size     |       |   | NZM2/3  |
| Description           |       |   | Switches are tripped by a voltage pulse or by the application of uninterrupted voltage.<br>When the shunt release is energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented.<br>Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... shunt release. |
| Connection type       |       |   | With bolt connection  |
| Auxiliary contacts    |       |   | without auxiliary contact   |
| Rated control voltage | $U_s$ | V | 48 V AC/DC  |
| For use with          |       |   | NZM2(-4), N(S)2(-4)<br>NZM3(-4), N(S)3(-4)  |

**Technical data**

**Shunt release**

|  |         |                 |                                      |
|--|---------|-----------------|--------------------------------------|
| Rated control voltage  | $U_s$   | V               |                                      |
| AC   | $U_s$   | V AC            | 12 - 440                             |
| DC   | $U_s$   | V DC            | 12 - 440                             |
| Frequency range  |         | Hz              | 50/60/200/400, DC                    |
| Operating range  |         |                 |                                      |
| AC   | $x U_s$ |                 | 0.7 - 1.1                            |
| DC   | $x U_s$ |                 | 0.7 - 1.1                            |
| Power consumption  |         |                 |                                      |
| Pick-up AC/DC  |         | VA/W            | 2.5                                  |
| Sealing AC/DC  |         | VA/W            | 2.5                                  |
| Maximum opening delay (response time until opening of the main contacts) |         | ms              | 20                                   |
| Maximum duty factor  |         | ms              | ∞                                    |
| Minimum command time   |         | ms              | 10 ... 15                            |
| Terminal capacities  |         | mm <sup>2</sup> |                                      |
| 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 be observed.                                   |
| 10.13 Mechanical function  |  | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

## Technical data ETIM 6.0

|  |   |                  |
|--|---|------------------|
| Low-voltage industrial components (EG000017) / Shunt release (for power circuit breaker) (EC001023)  |   |                  |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Full load current trip (ecl@ss8.1-27-37-04-18 [AKF016010]) |   |                  |
| Rated control supply voltage Us at AC 50HZ   | V | 48 - 48          |
| Rated control supply voltage Us at AC 60HZ   | V | 48 - 48          |
| Rated control supply voltage Us at DC  | V | 48 - 48          |
| Voltage type for actuating   |   | AC/DC            |
| Initial value of the undelayed short-circuit release - setting range   | A | 0                |
| End value adjustment range undelayed short-circuit release   | A | 0                |
| 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                |
| 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)

|   |  |   |
|---|--|---|
| <b>IL01208005Z (AWA1230-1915) Shunt release, Undervoltage release, Early-make auxiliary contact</b> |  |   |
| IL01208005Z (AWA1230-1915) Shunt release, Undervoltage release, Early-make auxiliary contact        |  | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01208005Z2011_08.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01208005Z2011_08.pdf</a> |