



Shunt release, 12VAC/DC

Part no. **NZM2/3-XA12AC/DC**
 Catalog No. **259752**

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. If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on. Shunt releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release. |
| Connection type | | | With bolt connection |
| Auxiliary contacts | | | without auxiliary contact |
| Rated control voltage | U_s | V | 12 V AC/DC |
| For use with | | | NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4) |

Technical data

Shunt release

| | | | |
|--|---------|-----------------|--------------------------------------|
| Rated control voltage | U_s | V | |
| AC | U_s | V AC | 12 - 12 |
| DC | U_s | V DC | 12 - 12 |
| Frequency | | 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 |
| Power consumption Pick-up = Sealing | | 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 ² | |
| Solid or flexible conductor, with ferrule | | mm ² | 1 x (0,75 - 2,5) 2 x (0,75 - 2,5) |
| | | AWG | 1 x (18 ... 14) 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. |

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| 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 Incriptions | | 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

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|---|---|------------------|
| 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@ss10.0.1-27-37-04-18 [AKF016013]) | | |
| Rated control supply voltage Us at AC 50HZ | V | 12 - 12 |
| Rated control supply voltage Us at AC 60HZ | V | 12 - 12 |
| Rated control supply voltage Us at DC | V | 12 - 12 |
| 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 |