DATASHEET - NZM1-XA24AC/DC

Shunt release, 24VAC/DC



| Part no. | NZM1-XA24AC/DC |
|-----------|----------------|
| | 259708 |
| EL Number | 4358723 |
| (Norway) | |

| General specifications | |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name | Eaton Moeller series NZM release |
| Part no. | NZM1-XA24AC/DC |
| EAN | 4015082597085 |
| Product Length/Depth | 37 millimetre |
| Product height | 66 millimetre |
| Product width | 32 millimetre |
| Product weight | 0.074 kilogram |
| Compliances | IEC |
| | UL/CSA RoHS conform |
| Certifications | CSA certified UL (Category Control Number DIHS) UL489 CSA (File No. 22086) UL (File No. E140305) CSA (Class No. 1437-01) CE marking IEC60947 UL listed CSA-C22.2 No. 5-09 |
| Product Tradename | NZM |
| Product Type | Accessories |
| Product Sub Type | Release |
| Delivery program | |
| Туре | Accessory Shunt release |
| Special features | 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 NZMXHIV early-make auxiliary contact or NZMXU undervoltage release. |
| Frame | NZM1 |
| Suitable for | Off-load switch |
| Used with | NZM1(-4), N(S)1(-4) |
| Technical Data - Electrical | |
| Voltage type | AC/DC |
| Voltage rating | 0.7 - 1.1 x Us |
| Voltage rating at AC (x Us) - min | 0.7 |
| Voltage rating at AC (x Us) - max | 1.1 |
| Rated control voltage (relay contacts) | 24 V DC 24 V AC |
| Rated control supply voltage | 24 V AC/DC |
| Rated control supply voltage (Us) at AC, 50 Hz - min | 24 V |
| Rated control supply voltage (Us) at AC, 50 Hz - max | 24 V |
| Rated control supply voltage (Us) at AC, 60 Hz - min | 24 V |
| Rated control supply voltage (Us) at AC, 60 Hz - max | 24 V |
| Rated control supply voltage (Us) at DC - min | 12 V |
| Rated control supply voltage (Us) at DC - max | 24 V |
| Frequency rating | 50 Hz / 60 Hz / 200 Hz / 400 Hz, DC (shunt release) |
| Pick-up power consumption (shunt release) | 2.5 VA/W |
| Reaction time | 20 ms |
| Time on duty - max | ∞ |
| Minimum command time - min | 10 ms |

| Minimum command time - max | 15 ms |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electric connection type | Screw connection |
| Technical Data - Mechanical | |
| Number of contacts (change-over contacts) | 0 |
| Number of contacts (normally closed contacts) | 0 |
| Number of contacts (normally open contacts) | 0 |
| Connection type | With terminal block on the left-hand switch side |
| Special features | 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 NZMXHIV early-make auxiliary contact or NZMXU undervoltage release. |
| Technical Data - Mechanical - Terminals | |
| Terminal capacity (solid/flexible conductor) | 0.75 mm ² - 2.5 mm ² (1x) for undervoltage releases, off-delayed with ferrule 0.75 mm ² - 2.5 mm ² (2x) at shunt release with ferrule 18 - 14 AWG (1x) for undervoltage releases, off-delayed 0.75 mm ² - 2.5 mm ² (2x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (2x) at shunt release 18 - 14 AWG (1x) at shunt release 18 - 14 AWG (2x) for undervoltage releases, off-delayed 0.75 mm ² - 2.5 mm ² (1x) at shunt release with ferrule |
| Design verification as per IEC/EN 61439 | |
| 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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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. |
| 10.9.2 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 b observed. |
| 10.12 Electromagnetic compatibility | Is the panel builder's responsibility. The specifications for the switchgear must b observed. |
| 10.13 Mechanical function | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. |

Technical data ETIM 9.0

| 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@ss13-27-37-04-18 [AKF016018]) | | | | |
| Rated control supply voltage AC 50 Hz | V | 24 - 24 | | |
| Rated control supply voltage AC 60 Hz | V | 24 - 24 | | |
| Rated control supply voltage DC | V | 12 - 24 | | |
| Voltage type for actuating | | AC/DC | | |
| Initial value of the undelayed short-circuit release - setting range | А | 0 | | |
| End value adjustment range undelayed short-circuit release | А | 0 | | |
| Power consumption | W | | | |
| 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 | No |
| Suitable for off-load switch | Yes |
| Suitable for motor safety switch | No |
| Suitable for overload relay | No |