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Powering Business Worldwide

NZM1-XA24AC/DC - Shunt release, 24VAC/DC



259708 NZM1-XA24AC/DC

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## 259708 NZM1-XA24AC/DC

Shunt release, 24VAC/DC

EL-Nummer (Norway)

4358723

Optional accessories for circuit-breaker series NZM offers a comprehensive portfolio of application possibilities for worldwide use. Modular functional groups make mounting flexible and simple.

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### Delivery program

Product range

Accessories

Accessories

Shunt release

Accessories

Shunt releases

Standard/Approval

UL/CSA, IEC

Construction size

NZM1

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 terminal block on the left-hand switch side

Auxiliary contacts

without auxiliary contact

Rated control voltage [ $U_c$ ]

24 V AC/DC V

For use with

NZM1(-4), N(S)1(-4)

### Technical data

Shunt release

Rated control voltage [U<sub>s</sub>]AC [U<sub>s</sub>]  
 24-24 V AC  
 Rated control voltage [U<sub>s</sub>]DC [U<sub>s</sub>]  
 24-24 V DC  
 Frequency  
 50/60/200/400, DC Hz  
 Operating rangeAC [x U<sub>s</sub>]  
 0.7 - 1.1  
 Operating rangeDC [x U<sub>s</sub>]  
 0.7 - 1.1  
 Power consumptionPick-up AC/DC  
 2.5 VA/W  
 Power consumptionPower consumption Pick-up = Sealing  
 2.5 VA/W  
 Maximum opening delay (response time until opening of the main contacts)  
 20 ms  
 Maximum duty factor  
 ∞ ms  
 Minimum command time  
 10 ... 15 ms  
 Terminal capacitiesSolid or flexible conductor, with ferrule  
 1 x (0,75 - 2,5)  
 2 x (0,75 - 2,5) mm<sup>2</sup>  
 Terminal capacities  
 1 x (18 ... 14)  
 2 x (18 ... 14) AWG

## Design verification as per IEC/EN 61439

### IEC/EN 61439 design verification

10.2 Strength of materials and parts10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2 Strength of materials and parts10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2 Strength of materials and parts10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2 Strength of materials and parts10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects

Meets the product standard's requirements.

10.2 Strength of materials and parts10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2 Strength of materials and parts10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts10.2.7 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 properties10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

10.9 Insulation properties10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

10.9 Insulation properties10.9.4 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) / 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 (ec1@ss10.0.1-27-37-04-18 [AKF016013])

Rated control supply voltage  $U_s$  at AC 50Hz

24 - 24 V

Rated control supply voltage  $U_s$  at AC 60Hz

24 - 24 V

Rated control supply voltage  $U_s$  at DC

12 - 24 V

Voltage type for actuating

AC/DC

Initial value of the undelayed short-circuit release - setting range

0 A

End value adjustment range undelayed short-circuit release

0 A

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

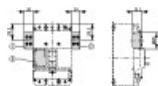
CSA Class No.

1437-01

North America Certification

UL listed, CSA certified

## Dimensions



NZM1-XA(HIV)

NZM1-XU(HIV)(20)

NZM1-XHIV

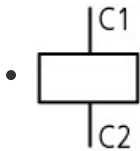
NZM1-XA(HIV)(L)

NZM1-XU(V)(HIV)(L)(20)

NZM1-XHIV(L)

NZM1-XHIVR

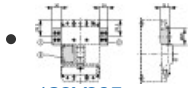
## Wiring diagram



123S017

Line drawing  
Shunt release

## Dimensions single product



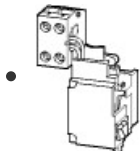
123X305

Line drawing

Releases

- NZM1-XA(HIV), NZM1-XA(HIV)(20), NZM1-XHIV
- NZM1-XA(HIV)(L), NZM1-XU(V)(HIV)(L)(20), NZM1-XHIV(L)
- NZM1-XHIVR

## 3D drawing



123I522

Line drawing

Undervoltage releases, shunt releases

## Product photo



1230PIC-756

Photo

## Instruction Leaflet

- [IL01203002Z](#)  
Asset  
(PDF, Language independent)

## CAD data

### edz files

- [DA-CE-ETN.NZM1-XA24AC\\_DC](#)  
File  
(Web)

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