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NZM1-XU24DC - Undervoltage release, 24 V DC



259452 NZM1-XU24DC

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259452 NZM1-XU24DC

Undervoltage release, 24 V DC

EL-Nummer (Norway)

4315547

Optional accessories for the circuit-breaker series NZM offers a comprehensive portfolio of application options for use world wide. The mounting is always flexible and easy thanks to the modular function groups. Notes: non-delayed disconnection of NZM circuit-breaker or N switch-disconnector when the control voltage sinks below 35-70% U_S. For use with Emergency-Stop devices in conjunction with emergency-stop button. when the undervoltage release is de-energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release. Can be used for: NZM1(-4), N(N/O)1(-4)

- Delivery program

- Technical data

- Design verification as per IEC/EN 61439

- Technical data ETIM 7.0

- Approvals

- Dimensions

Delivery program

Product range

Accessories

Accessories

Undervoltage release

Accessories

Undervoltage releases

Standard/Approval

UL/CSA, IEC

Construction size

NZM1

Description

Non-delayed disconnection of NZM circuit-breaker or N switch-disconnector when the control voltage sinks below 35 – 70% U_S.

For use with emergency-stop devices in connection with an emergency-stop button.

When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on.

Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.

Connection type

with terminal block on the left-hand switch side

Auxiliary contacts

without auxiliary contact

Rated control voltage [U_S]

24 V DC V

For use with

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

Technical data

Technical data

Undervoltage release
Rated control voltage [U_s] DC [U_s]
24-24 V DC
Rated control voltage [U_s] Rated control voltage [U_s]
24 V DC V
Operating range Drop-out voltage
0.35 - 0.7 x U_s
Operating range Pick-up voltage [x U_c]
0.85 - 1.1
Power consumption AC Pick-up AC
1.5 VA
Power consumption AC Sealing AC
1.5 VA
Power consumption DC Pick-up DC
0.8 W
Power consumption DC Sealing DC
0.8 W
Maximum opening delay (response time until opening of the main contacts)
19 ms
Minimum command time
10 - 15 ms
Terminal capacities
Solid or flexible conductor, with ferrule
1 x (0,75 - 2,5)
2 x (0,75 - 2,5) mm²
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 parts 10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2 Strength of materials and parts 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 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.5 Lifting

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

10.2 Strength of materials and parts 10.2.6 Mechanical impact

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

10.2 Strength of materials and parts 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 Insulation properties 10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

10.9 Insulation properties 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 U_s at AC 50Hz

0 - 0 V

Rated control supply voltage U_s at AC 60Hz

0 - 0 V

Rated control supply voltage U_s at DC

24 - 24 V

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

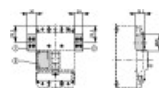
CSA Class No.

1437-01

North America Certification

UL listed, CSA certified

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

CAD data

- [Product-specific CAD data](#)
(Web)
- [3D Preview](#)
(Web)

DWG files

- [DA-CD-nzm1_xu](#)
File
(Web)


edz files

- [DA-CE-ETN.NZM1-XU24DC](#)
File
(Web)

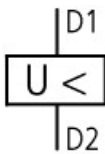
Step files

- [DA-CS-nzm1_xu](#)
File
(Web)

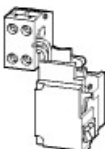
Dimensions single product

- 
[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-XHVR

Wiring diagram

- 
[123S013](#)
Line drawing
Symbol, undervoltage releases

3D drawing

- 
[123I522](#)
Line drawing
Undervoltage releases, shunt releases

Product photo

- 
[1230PIC-1127](#)

Photo

Instruction Leaflet

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

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