



259736

NZM 1-XAL24AC/DC

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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 3 m connection cable instead of screw
termination

Auxiliary contacts
without auxiliary contact

Rated control voltage [U_s]
24 V AC/DC V

For use with
NZM1(-4), N(S)1(-4)

TECHNICAL DATA

Shunt release

Rated control voltage [U_s]
AC [U_s]
24-24 V AC

Rated control voltage [U_s]
DC [U_s]
24-24 V DC

Frequency
50/60/200/400, DC Hz

Operating range
AC [$x U_s$]
0.7 - 1.1

Operating range
DC [$x U_s$]
0.7 - 1.1

Power consumption
Pick-up AC/DC
2.5 VA/W

Power consumption
Power consumption Pick-up = Sealing

2.5 VAW

Maximum opening delay (response time until opening of the main contacts)
20 ms

Maximum duty factor
 ∞ 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

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 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) / 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 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
24 - 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

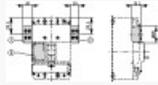
UL Category Control No.
DIHS

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





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