



189743

NZM 2/3-XA2A208-240AC

Overview

Specifications

Resources



Delivery program

Technical data

Design verification as per IEC/EN 61439

Technical data ETIM 7.0

Approvals

DELIVERY PROGRAM

Product range
Accessories

Accessories
Shunt release

Accessories
Shunt release with two relays

Standard/Approval
UL/CSA, IEC

Construction size
NZM 2/3

Description

The breakers are actuated by a voltage pulse or by applying a no-break current. For signaling commands or different states of the circuit-breaker. Two relays per unit. The activation criteria can be configured in the trip unit.

Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager.

If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on.

Only for use in combination with circuit-breakers with electronic trips.

Shunt trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, under-voltage trip NZM...-XU... or shunt trip NZM...-XA.

Relay coil is controlled by trip unit.

Relay contacts for control wiring.

Relays can be used for controlling remote operator with $U_s=208-204$ V AC.

Control wiring on push-in clamps.

Cannot be used with the PXR10 NZM-AX electronic trip.

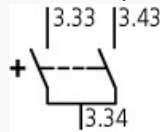
Connection type
with push in terminal

Auxiliary contacts
without auxiliary contact

For use with
PXR20(25) NZM(-4)-...X...
PXR20(25) NZMB(-4)-...X...

Number of relays
2

Contact sequence



TECHNICAL DATA

Shunt release

Rated control voltage [U_s]

AC [U_s]

208-240 V AC

Operating range

AC [$x U_s$]

0.7 - 1.1

Operating range
DC [$\times U_N$]
0.7 - 1.1

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

Power consumption
Power consumption Pick-up = Sealing
2.5 VA/W

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

Maximum duty factor
 ∞ ms

Minimum command time
Approx. 10 ... 15 ms

Terminal capacity
Solid
1 x (0.2 – 1.5) mm²

Terminal capacity
Stranded
1 x (0.25 – 1.5) mm²

Terminal capacity
1 x (24 - 16) AWG

Terminal capacity
with insulated end sleeve in accordance with
DIN46224 / 4
1 x (0,25 - 1,5) mm²

Terminal capacity
with uninsulated end sleeve in accordance with
DIN46228 / 1
1 x (0,25 - 0,75) mm²

Relay contacts

Rated control voltage [U_s]
AC [U_s]
24-240 V AC

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

Contacts
Rated impulse withstand voltage [U_{imp}]
4000 V AC

Contacts
Rated insulation voltage [U_i]
250 V

Contacts
Overvoltage category/pollution degree
II/2

Switching capacity
Rated operational current
AC-1
24 V [I_e]
1 A

Switching capacity
Rated operational current
AC-1
110 V [I_e]
1 A

Switching capacity
Rated operational current
AC-1
230 V [I_e]
1 A

Switching capacity
Rated operational current
DC-1
24 V [I_e]
1 A

Switching capacity
Min. switching capacity (reference value)
0.1 mA / 0.1 VDC

Connection

Stripping length
8 mm

Connection
Terminal capacity
Solid
1 x (0.2 – 1.5) mm²

Connection
Terminal capacity
Stranded
1 x (0.25 – 1.5) mm²

Connection
Terminal capacity
1 x (24 - 16) AWG

Connection
Terminal capacity
with insulated end sleeve in accordance with
DIN46224 / 4
1 x (0,25 - 1,5) mm²

Connection
Terminal capacity
with uninsulated end sleeve in accordance with
DIN46228 / 1
1 x (0,25 - 0,75) mm²

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
208 - 250 V

Rated control supply voltage U_s at AC 60HZ
208 - 250 V

Rated control supply voltage U_s at DC
0 - 0 V

Voltage type for actuating
AC

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
Spring clamp connection

Number of contacts as normally open contact
2

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
Yes

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



