189727
NZM2/3-XU2A208-240AC

DELIVERY PROGRAM

Product range
Accessories

Accessories
Undervoltage release

Accessories
Undervoltage release with two relays

Standard/Approval
UL/CSA, IEC

Construction size
NZM2/3

Description
Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below 35 - 70% Us.
For use with emergency-stop devices in connection with an emergency-stop button.
For signalizing 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.
When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on.
Only for use in combination with circuit-breakers with electronic trips.
Under-voltage 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 contacts for control wiring.
Relays can be used for controlling remote operator with Us=208-204 V AC.
Control wiring on push-in clamps.
Cannot be used with the PXR10 NZM-AX electronic trip.

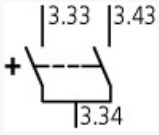
Connection type
with push in terminal

Auxiliary contacts
without auxiliary contact

For use with
PXR20(25) NZM2(-4)-..X…
PXR20(25) NZM3(-4)-..X…

Number of relays
2

Contact sequence



TECHNICAL DATA

Undervoltage release

Rated control voltage [U_s]
AC [U_s]
208-240 V AC

Operating range
Drop-out voltage
0.35 - 0.7 x U_s

Operating range
Pick-up voltage [x Uc]
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 capacity
Solid
1 x (0.2 – 1.5) mm^2

Terminal capacity
Stranded
1 x (0.25 – 1.5) mm^2

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) mm^2

Connection
Terminal capacity
Stranded
1 x (0.25 – 1.5) mm^2

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) mm^2

Connection
Terminal capacity
with uninsulated end sleeve in accordance with
DIN46228 / 1
1 x (0,25 - 0,75) mm^2

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

Rated control supply voltage Us at AC 50HZ
208 - 240 V

Rated control supply voltage Us at AC 60HZ
208 - 240 V

Rated control supply voltage Us at DC
0 - 0 V

Voltage type for actuating
AC

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

Delayed
No

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