NZM2/3-XUHIV2A208-240AC - Undervoltage release for NZM2/3, configurable relays, 2NO, 1 early-make auxiliary contact, 1NO, 208-240AC, Push-in terminals

189735 NZM2/3-XUHIV2A208-240AC

Overview Specifications Resources

189735 NZM2/3-XUHIV2A208-240AC

Undervoltage release for NZM2/3, configurable relays, 2NO, 1 early-make auxiliary contact, 1NO, 208-240AC, Push-in terminals

EL-Nummer (Norway) 4363011

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: Undervoltage releases with one early-make contact and two relays. For interlocking and load-shedding circuits, as well as for early-make of the undervoltage release in main-switch applications. Non-delayed disconnection of circuit-breaker NZM when control voltage drops below 35 - 70 % Us. For use with emergency switching off devices in conjunction with emergency switching off buttom. For signalizing commands or different states of the circuit-breaker. Two relays per unit. Actuation reason can be configured in the trip unit. Configuration via communication or circuit breaker display or front USB connection and Eaton Power Xpert Protection Manager. When the undervoltage release is de-energized, accidental contact with the main contacts of the circuit-breaker dureing attempts to switch on is reliably prevented. Early-make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4). Only suitable for use in conjunction with circuit-breakers with electronic releases. Connot be used in conjunction with remote operator NZM..-XR.. Undervoltage release relais modules cannot be installed simultaneously with early-make contact NZM..-XHIV, or untervoltage release NZM..-XU.., or shunt release NZM..-XA... Relay coil actuated by trip unit. Relay contact for control wiring. Control wiring to push-in terminals. Cannot be used with PXR10 NZM-AE electronic release.

- 
- 

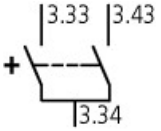
- Delivery program
- Technical data
- Design verification as per IEC/EN 61439
- Technical data ETIM 7.0

Delivery program

Product range
Accessories
Accessories
Undervoltage release
Accessories
Undervoltage release with early-make auxiliary contact and two relays

- Approvals

Standard/Approval
UL/CSA, IEC
Construction size
NZM2/3
Description
For interlock circuits and load-shedding circuits as well as make-before-break interruption of the shunt trip for primary breaker use.
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.
Make-before-break activation of auxiliary contact when switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4).
Only for use in combination with circuit-breakers with electronic trips.
Cannot be used in conjunction with NZM..-XR... remote operator.
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 coil is controlled by trip unit.
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
With early-make auxiliary contact and 2 relays
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 rangeDrop-out voltage
0.35 - 0.7 x U_s
Operating rangePick-up voltage [x Uc]
0.85 - 1.1
Power consumptionAC Pick-up AC
1.5 VA
Power consumptionAC Sealing AC
1.5 VA
Power consumptionDCPick-up DC
0.8 W
Power consumptionDCSealing 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 capacitywith insulated end sleeve in accordance with DIN46224 / 4
1 x (0,25 - 1,5) mm²
Terminal capacitywith 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
ContactsRated impulse withstand voltage [U_{imp}]
4000 V AC
ContactsRated insulation voltage [U_i]
250 V
ContactsOvervoltage category/pollution degree
II/2
Switching capacityRated operational currentAC–124 V [I_e]
1 A
Switching capacityRated operational currentAC–1110 V [I_e]
1 A
Switching capacityRated operational currentAC–1230 V [I_e]
1 A
Switching capacityRated operational currentDC-124 V [I_e]
1 A
Switching capacityMn. switching capacity (reference value)
0.1 mA / 0.1 VDC
ConnectionStripping 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 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) / 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 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
3
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

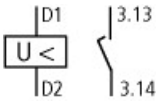
Approvals

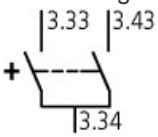
Product Standards
UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.
E140305
UL Category Control No.
DIHS
CSA File No.
022086
CSA Class No.
1437-01
North America Certification
UL listed, CSA certified

Product photo

- 
  sg05318_c
  Photo
- 
  sg05318_l
  Photo
- 
  sg05318_r
  Photo

Wiring diagram

- 

  1230SWI-145
  Line drawing
- 

  1230SWI-146
  Line drawing

Instruction Leaflet

- NZM2/3 XHIV (IL012141ZU)
  IL012141ZU
  (PDF, 03/20, Language independent)

Download-Center

- Download-Center (this item)
  Eaton EMEA Download-Center - download data for this item
- Download-Center
  Eaton EMEA Download-Center

Generate data sheet in PDF format

Generate data sheet in Excel format

Write a comment