DATASHEET - NZM4-XU2A208-240AC



Undervoltage release for NZM4, configurable relays, 2NO, 208-240AC, Push-in terminals



Part no. NZM4-XU2A208-240AC Catalog No. 189731

Similar to illustration

Delivery program

| Delivery program | |
|--------------------|---|
| Product range | Accessories |
| Accessories | Undervoltage release |
| Accessories | Undervoltage release with two relays |
| Standard/Approval | UL/CSA, IEC |
| Construction size | NZM4 |
| Description | Non-delayed disconnection of NZM circuit-breaker or N switch-disconnector when the control voltage sinks 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 NZMXHIV, under-voltage trip NZMXU or shunt trip NZMXA. 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) NZM4(-4)X |
| Number of relays | 2 |
| Contact sequence | 1 3.33 3.43 1 3.34 |

Technical data Undervoltage release

| Rated control voltage | U_s | V | |
|--|-------|------------------|-----------------|
| AC | Us | V AC | 208 - 240 |
| Operating range | | | |
| Drop-out voltage | | $x U_s$ | 0.35 - 0.7 |
| Pick-up voltage | x Uc | | 0.85 - 1.1 |
| Power consumption | | | |
| AC | | | |
| Pick-up AC | | VA | 3.6 |
| Sealing AC | | VA | 3.6 |
| DC | | x U _s | |
| Pick-up DC | | W | 2.5 |
| Sealing DC | | W | 2.5 |
| Maximum opening delay (response time until opening of the main contacts) | | ms | 23 |
| Minimum command time | | ms | 10 - 15 |
| Terminal capacity | | | |
| Solid | | mm ² | 1 x (0.2 – 1.5) |

| Stranded | | mm ² | $1 \times (0.25 - 1.5)$ |
|---|------------------|-------------------|-------------------------|
| | | AWG | 1 x (24 - 16) |
| with insulated end sleeve in accordance with DIN46224 / 4 | | mm ² | 1 x (0,25 - 1,5) |
| with uninsulated end sleeve in accordance with DIN46228 / 1 | | mm^2 | 1 x (0,25 - 0,75) |
| Relay contacts | | | |
| Rated control voltage | U_s | V | |
| AC | U _s | V AC | 24 - 240 |
| DC | U_s | V DC | 24 - 24 |
| Contacts | | | |
| Rated impulse withstand voltage | U _{imp} | V AC | 6000 |
| Rated insulation voltage | Ui | V | 250 |
| Overvoltage category/pollution degree | | | III/3 |
| Switching capacity | | kA _{rms} | |
| Rated operational current | | | |
| AC-1 | | | |
| 24 V | Ie | Α | 1 |
| 110 V | Ie | Α | 1 |
| 230 V | Ie | Α | 1 |
| DC-1 | | | |
| 24 V | Ie | Α | 1 |
| Min. switching capacity (reference value) | | | 10 ma / 12 V |
| Connection | | | |
| Stripping length | | mm | 8 |
| Terminal capacity | | | |
| Solid | | mm^2 | 1 x (0.2 – 1.5) |
| Stranded | | mm ² | 1 x (0.25 – 1.5) |
| | | AWG | 1 x (24 - 16) |
| with insulated end sleeve in accordance with DIN46224 / 4 | | mm ² | 1 x (0,25 - 1,5) |
| with uninsulated end sleeve in accordance with DIN46228 / 1 | | mm ² | 1 x (0,25 - 0,75) |
| | | | |

Design verification as per IEC/EN 61439

| EC/EN 61439 design verification | |
|--|--|
| 10.2 Strength of materials and parts | |
| 10.2.2 Corrosion resistance | Meets the product standard's requirements. |
| 10.2.3.1 Verification of thermal stability of enclosures | Meets the product standard's requirements. |
| · · | |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat | Meets the product standard's requirements. |
| 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. |
| 10.2.4 Resistance to ultra-violet (UV) radiation | Meets the product standard's requirements. |
| 10.2.5 Lifting | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.6 Mechanical impact | Does not apply, since the entire switchgear needs to be evaluated. |
| 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. |
| 10.9.3 Impulse withstand voltage | Is the panel builder's responsibility. |
| 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 8.0

| 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 | V | 208 - 240 |
| Rated control supply voltage Us at AC 60HZ | V | 208 - 240 |
| Rated control supply voltage Us at DC | V | 0 - 0 |
| Voltage type for actuating | | AC |
| Type of electric connection | | Screw 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 | | No |
| 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 |

Additional product information (links)

IL01210005Z shunt trip, under-voltage trip, make-before-break auxiliary breaker

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https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL01210005Z2010_10.pdf