



Undervoltage release, 220-250VDC

Part no. **NZM2/3-XU220-250DC**
259517

| General specifications | |
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| Product name | Eaton Moeller series NZM release |
| Part no. | NZM2/3-XU220-250DC |
| EAN | 4015082595173 |
| Product Length/Depth | 42 millimetre |
| Product height | 90 millimetre |
| Product width | 30 millimetre |
| Product weight | 0.064 kilogram |
| Compliances | UL/CSA IEC RoHS conform |
| Certifications | CSA certified UL489 CSA-C22.2 No. 5-09 UL (File No. E140305) CSA (Class No. 1437-01) IEC60947 CE marking UL (Category Control Number DIHS) UL listed CSA (File No. 22086) |
| Product Tradename | NZM |
| Product Type | Accessories |
| Product Sub Type | Release |
| Delivery program | |
| Type | Accessory Undervoltage release |
| Special features | 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. When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on. Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release. |
| Frame | NZM2/3 |
| Suitable for | Off-load switch |
| Used with | NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4) |
| Technical Data - Electrical | |
| Voltage type | DC |
| Rated control voltage (relay contacts) | 250 V DC 220 V DC |
| Rated control supply voltage | 220 - 250 V DC |
| Rated control supply voltage (Us) at AC, 50 Hz - min | 0 V |
| Rated control supply voltage (Us) at AC, 50 Hz - max | 0 V |
| Rated control supply voltage (Us) at AC, 60 Hz - min | 0 V |
| Rated control supply voltage (Us) at AC, 60 Hz - max | 0 V |
| Rated control supply voltage (Us) at DC - min | 220 V |
| Rated control supply voltage (Us) at DC - max | 250 V |
| Voltage tolerance - min | 0.85 |
| Voltage tolerance - max | 1.1 |
| Drop-out voltage of undervoltage release AC/DC - min | 0.35 x Us |
| Drop-out voltage of undervoltage release AC/DC - max | 0.7 x Us |
| Power consumption | 0.8 W (sealing DC) 1.5 VA (sealing AC) |
| Pick-up power consumption at AC (undervoltage release) | 1.5 V-A |
| Pick-up power consumption at DC (undervoltage release) | 0.8 W |
| Reaction time | 19 ms |

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| Minimum command time - min | | 10 ms |
| Minimum command time - max | | 15 ms |
| Electric connection type | | Screw connection |
| Technical Data - Mechanical | | |
| Number of contacts (change-over contacts) | | 0 |
| Number of contacts (normally closed contacts) | | 0 |
| Number of contacts (normally open contacts) | | 0 |
| Connection type | | With bolt connection |
| Special features | | 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. When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on. Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release. |
| Technical Data - Mechanical - Terminals | | |
| Terminal capacity (solid/flexible conductor) | | 0.75 mm ² - 2.5 mm ² (1x) for undervoltage releases, off-delayed with ferrule 0.75 mm ² - 2.5 mm ² (2x) at shunt release with ferrule 18 - 14 AWG (1x) at shunt release 0.75 mm ² - 2.5 mm ² (1x) at shunt release with ferrule 18 - 14 AWG (2x) for undervoltage releases, off-delayed 0.75 mm ² - 2.5 mm ² (2x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (2x) at shunt release 18 - 14 AWG (1x) for undervoltage releases, off-delayed |
| Design verification as per IEC/EN 61439 | | |
| 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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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. |
| 10.9.2 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 9.0

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| 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@ss13-27-37-04-17 [AKF015018]) | | | |
| Rated control supply voltage AC 50 Hz | V | | 0 - 0 |
| Rated control supply voltage AC 60 Hz | V | | 0 - 0 |
| Rated control supply voltage DC | V | | 220 - 250 |
| Voltage type for actuating | | | DC |
| 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 |

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| Delayed | | | No |
| Suitable for power circuit breaker | | | No |
| Suitable for off-load switch | | | Yes |
| Suitable for motor safety switch | | | No |
| Suitable for overload relay | | | No |