



Undervoltage release, 208-240VAC, +2early N/O

Part no. **NZM2/3-XUHIV20208-240AC**  
**259651**

General specifications	
Product name	Eaton Moeller series NZM release
Part no.	NZM2/3-XUHIV20208-240AC
EAN	4015082596514
Product Length/Depth	42 millimetre
Product height	90 millimetre
Product width	30 millimetre
Product weight	0.135 kilogram
Compliances	UL/CSA IEC RoHS conform
Certifications	UL (File No. E140305) CSA certified CSA-C22.2 No. 5-09 UL489 IEC60947 CSA (Class No. 1437-01) UL listed UL (Category Control Number DIHS) CE marking CSA (File No. 22086)
Product Tradename	NZM
Product Type	Accessories
Product Sub Type	Release
Delivery program	
Type	Accessory Undervoltage release with early-make auxiliary contact
Connection	Screw
Special features	Undervoltage release with 2 early-make auxiliary contacts, e.g., for early-make connection of undervoltage release in main switch applications, as well as for interlock and load shedding circuits. 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. Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms Cannot be used in conjunction with NZM...-XR... remote operator. Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.
Frame	NZM2/3
Fitted with:	Two separate early-make auxiliary contacts
Suitable for	Off-load switch
Used with	NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)
Technical Data - Electrical	
Voltage type	AC
Rated control voltage (relay contacts)	208 V AC 240 V AC
Rated control supply voltage	208 - 240 V 50/60 Hz
Rated control supply voltage (Us) at AC, 50 Hz - min	208 V
Rated control supply voltage (Us) at AC, 50 Hz - max	240 V
Rated control supply voltage (Us) at AC, 60 Hz - min	208 V
Rated control supply voltage (Us) at AC, 60 Hz - max	240 V
Rated control supply voltage (Us) at DC - min	0 V
Rated control supply voltage (Us) at DC - max	0 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		1.5 VA (sealing AC) 0.8 W (sealing DC)
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
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)		2
Connection type		Contacts 3.23 and 3.24 with separate 3 m connection cables
Special features		Undervoltage release with 2 early-make auxiliary contacts, e.g., for early-make connection of undervoltage release in main switch applications, as well as for interlock and load shedding circuits. 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. Early make of auxiliary contacts on switching on and off (manual operation): approx. 20 ms Cannot be used in conjunction with NZM...-XR... remote operator. 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 <sup>2</sup> - 2.5 mm <sup>2</sup> (2x) at shunt release with ferrule 18 - 14 AWG (2x) at shunt release 18 - 14 AWG (2x) for undervoltage releases, off-delayed 0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> (2x) for undervoltage releases, off-delayed with ferrule 0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> (1x) at shunt release with ferrule 18 - 14 AWG (1x) at shunt release 18 - 14 AWG (1x) for undervoltage releases, off-delayed 0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> (1x) for undervoltage releases, off-delayed with ferrule
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### 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

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	208 - 240
Rated control supply voltage AC 60 Hz	V	208 - 240
Rated control supply voltage 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		No
Suitable for overload relay		No