## Undervoltage release, 220-250VDC



Part no. NZM1-XU220-250DC 259460

Product name	Eaton Moeller series NZM release
Part no.	NZM1-XU220-250DC
EAN	4015082594602
Product Length/Depth	37 millimetre
Product height	66 millimetre
Product width	32 millimetre
Product weight	0.044 kilogram
Compliances	IEC UL/CSA RoHS conform
Certifications	UL listed CSA (Class No. 1437-01) CSA (File No. 22086) CE marking CSA-C22.2 No. 5-09 UL (File No. E140305) UL (Category Control Number DIHS) UL489 IEC60947 CSA certified
Product Tradename	NZM
Product Type	Accessories
Product Sub Type	Release
Туре	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-st devices in connection with an emergency-stop button. When the under-voltag trip is switched off, accidental contact with the circuit breaker's primary contais prevented when switched on. Undervoltage releases cannot be installed simultaneously with NZMXHIV early-make auxiliary contact or NZMXA. shunt release.
Frame	NZM1
Suitable for	Off-load switch
Used with	NZM1(-4), N(S)1(-4)
Voltage type	AC
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

Minimum command time - max	15 ms
Electric connection type	Screw connection
Number of contacts (change-over contacts)	0
Number of contacts (normally closed contacts)	0
Number of contacts (normally open contacts)	0
Connection type	With terminal block on the left-hand switch side
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 contact is prevented when switched on. Undervoltage releases cannot be installed simultaneously with NZMXHIV early-make auxiliary contact or NZMXA shunt release.
Terminal capacity (solid/flexible conductor)	0.75 mm² - 2.5 mm² (1x) at shunt release with ferrule 0.75 mm² - 2.5 mm² (2x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (1x) for undervoltage releases, off-delayed 0.75 mm² - 2.5 mm² (1x) for undervoltage releases, off-delayed with ferrule 0.75 mm² - 2.5 mm² (2x) at shunt release with ferrule 18 - 14 AWG (2x) at shunt release 18 - 14 AWG (1x) for undervoltage releases, off-delayed 18 - 14 AWG (1x) at shunt release
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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must 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	0 - 0		
Rated control supply voltage Us at AC 60HZ	V	0 - 0		
Rated control supply voltage Us at DC	V	220 - 250		
Voltage type for actuating		AC		
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		
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