Undervoltage release for NZM2/3, configurable relays, 2NO, 1 early-make auxiliary contact, 1NO, 24DC, Push-in terminals



Part no. NZM2/3-XUHIV2A24DC

189733

**EL Number** 

4363012

(Norway)

(NOIWay)	
Developer	Fatar Marillar action N7M values
Product name	Eaton Moeller series NZM release
Part no.	NZM2/3-XUHIV2A24DC
EAN	4015081877287
Product Length/Depth	115 millimetre
Product height	65 millimetre
Product width	75 millimetre
Product weight	0.08 kilogram
Compliances	UL/CSA IEC RoHS conform
Certifications	UL (Category Control Number DIHS) UL (File No. E140305) CSA certified IEC60947 UL489 UL listed CE marking CSA (Class No. 1437-01) CSA (File No. 22086) CSA-C22.2 No. 5-09
Product Tradename	NZM
Product Type	Accessories
Product Sub Type	Release
Туре	Accessory Undervoltage release Undervoltage release with early-make auxiliary contact and two relays
Special features	For interlock circuits, load-shedding circuits, make-before-break interruption of shunt trip for primary breaker use Instantaneous shut-off NZM breaker at control voltage below 35-70% Us For emergency-stop devices with an emergency-stop button For breaker's signalizing commands/different states 2 relays/unit Trip unit config of activation criteria Config by communication/breaker display/front USB port/Eaton Power Xpert Protection Manager Switched off under-voltage trip: accidental contact with breaker's primary contacts is prevented when switched auxiliary contact make-before-break activation when manual switching on and o ~20 ms(NZM2/3)/90 ms(NZM4) For use with electronic trip breakers except NZM XR Under-voltage trip relay modules incompatible with NZMXHIV, NZMXU. NZMXA. Trip unit controlled relay coil Push-in clamp relay contacts for control wiring. Relays use for controlling remote operator at Us=208-204 V AC Incompatible with PXR10 NZM-AX
Frame	NZM2/3
Fitted with:	Early-make auxiliary contact and 2 relays
Suitable for	Motor safety switch Off-load switch
Used with	PXR20(25) NZM3(-4)X PXR20(25) NZM2(-4)X
Voltage type	
	AC
	AC 250 V
Rated insulation voltage (Ui)	250 V
Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp)	250 V 4 kV AC
Rated insulation voltage (Ui)	250 V
Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp)	250 V 4 kV AC 240 V AC 24 V DC
Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated control voltage (relay contacts)	250 V 4 kV AC 240 V AC 24 V DC 24 V AC
Rated insulation voltage (Ui)  Rated impulse withstand voltage (Uimp)  Rated control voltage (relay contacts)  Rated control supply voltage (Us) at AC, 50 Hz - min	250 V 4 kV AC 240 V AC 24 V DC 24 V AC 0 V
Rated insulation voltage (Ui)  Rated impulse withstand voltage (Uimp)  Rated control voltage (relay contacts)  Rated control supply voltage (Us) at AC, 50 Hz - min  Rated control supply voltage (Us) at AC, 50 Hz - max	250 V 4 kV AC 240 V AC 24 V DC 24 V AC 0 V
Rated insulation voltage (Ui)  Rated impulse withstand voltage (Uimp)  Rated control voltage (relay contacts)  Rated control supply voltage (Us) at AC, 50 Hz - min  Rated control supply voltage (Us) at AC, 50 Hz - max  Rated control supply voltage (Us) at AC, 60 Hz - min	250 V 4 kV AC 240 V AC 24 V DC 24 V AC 0 V 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  Rated operational current	0.7 x Us  1 A (230 V AC-1, relay contacts) 1 A (24 V AC-1, relay contacts) 1 A (110 V AC-1, relay contacts) 1 A (24 V DC-1, relay contacts)
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
Switching capacity (reference value) - min	0.1 mA / 0.1 VDC
Reaction time	19 ms
Minimum command time - min	10 ms
Minimum command time - max	15 ms
Electric connection type	Screw connection
Overvoltage category	II II
Pollution degree	2
Number of contacts (change-over contacts)	0
Number of contacts (normally closed contacts)	0
Number of contacts (normally open contacts)	3
Number of relays	2
Connection type	With push in terminal
Strip length	8 mm (relay contact connection)
	voltage below 35-70% Us For emergency-stop devices with an emergency-stop button For breaker's signalizing commands/different states 2 relays/unit Trip ur config of activation criteria Config by communication/breaker display/front USI port/Eaton Power Xpert Protection Manager Switched off under-voltage trip: accidental contact with breaker's primary contacts is prevented when switche Auxiliary contact make-before-break activation when manual switching on an ~20 ms(NZM2/3)/90 ms(NZM4) For use with electronic trip breakers except NZI XR Under-voltage trip relay modules incompatbile with NZMXHIV, NZMYNZMXA. Trip unit controlled relay coil Push-in clamp relay contacts for cont wiring. Relays use for controlling remote operator at Us=208-204 V AC Incompawith PXR10 NZM-AX
Terminal capacity (stranded cable)	0.25 mm² - 0.75 mm² (1x) for undervoltage release with uninsulated end sleeve accordance with DIN46228 / 1 0.25 mm² - 0.75 mm² (1x) for undervoltage release 0.25 mm² - 1.5 mm² (1x) for undervoltage release with insulated end sleeve in accordance with DIN46224 / 4 0.25 mm² - 1.5 mm² (1x) at shunt release 24 - 16 AWG (1x) at shunt release 0.25 mm² - 1.5 mm² (1x) for undervoltage release 24 - 16 AWG (1x) for undervoltage release
Terminal capacity (solid cable)	0.2 mm <sup>2</sup> - 1.5 mm <sup>2</sup> (1x) at shunt release 0.2 mm <sup>2</sup> - 1.5 mm <sup>2</sup> (1x) for undervoltage release
10.2.2 Corrosion resistance	Meets the product standard's requirements.
	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 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects	Meets the product standard's requirements.  Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation	Meets the product standard's requirements.  Meets the product standard's requirements.  Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting	Meets the product standard's requirements.  Meets the product standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.
10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact	Meets the product standard's requirements.  Meets the product standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.
10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions	Meets the product standard's requirements.  Meets the product standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.3 Degree of protection of assemblies	Meets the product standard's requirements.  Meets the product standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.
10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.3 Degree of protection of assemblies 10.4 Clearances and creepage distances	Meets the product standard's requirements.  Meets the product standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.3 Degree of protection of assemblies 10.4 Clearances and creepage distances 10.5 Protection against electric shock	Meets the product standard's requirements.  Meets the product standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.
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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**

Toomitour data 211111 olo		
Low-voltage industrial components (EG000017) / Under voltage coil (EC001022)		
Electric engineering, automation, process control engineering / Low-voltage switc	h technology / Circuit bre	eaker (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	24 - 24
Voltage type for actuating		AC
Type of electric connection		Screw 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		No
Suitable for off-load switch		Yes
Suitable for motor safety switch		Yes
Suitable for overload relay		No