

Undervoltage release, 24VAC, +2early N/O

Part no. **NZM1-XUHIV24AC**
 Catalog No. **259531**



Delivery program

Product range				Accessories
Accessories				Undervoltage release
Accessories				Undervoltage release with early-make auxiliary contact
Standard/Approval				UL/CSA, IEC
Construction size				NZM1
Description				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 Undervoltage releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XA... shunt release.
Connection type				with terminal block on the left-hand switch side
Auxiliary contacts				with 2 early-make auxiliary contacts
Rated control voltage	U_s	V	24 V 50/60 Hz	
For use with				NZM1(-4), N(S)1(-4)

Technical data

Undervoltage release

Rated control voltage	U_s	V	
AC	U_s	V AC	24 - 24
Rated control voltage	U_s	V	24 V 50/60 Hz
Operating range			
Drop-out voltage		$x U_s$	0.35 - 0.7
Pick-up voltage		$x U_c$	0.85 - 1.1
Power consumption			
AC			
Pick-up AC		VA	1.5
Sealing AC		VA	1.5
DC		$x U_s$	
Pick-up DC		W	0.8
Sealing DC		W	0.8
Maximum opening delay (response time until opening of the main contacts)		ms	19
Minimum command time		ms	10 - 15

Terminal capacities

Solid or flexible conductor, with ferrule	mm^2	1 x (0,75 - 2,5) 2 x (0,75 - 2,5)
	AWG	1 x (18 ... 14) 2 x (18 ... 14)

Design verification as per IEC/EN 61439

IEC/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	24 - 24
Rated control supply voltage Us at AC 60HZ	V	24 - 24
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		No
Suitable for overload relay		No