



**Undervoltage release, 48VAC, +2early N/O**

**Part no. NZM2/3-XUHIV48AC**  
**Catalog No. 259585**

Similar to illustration

## Delivery program

Product range			Accessories
Accessories			Undervoltage release
Accessories			Undervoltage release with early-make auxiliary contact
Standard/Approval			UL/CSA, IEC
Construction size			NZM2/3
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. Cannot be used in conjunction with NZM...-XR... remote operator.
Connection type			With bolt connection
Auxiliary contacts			with 2 early-make auxiliary contacts
Rated control voltage	U <sub>s</sub>	V	48 V 50/60 Hz
For use with			NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)

## Technical data

### Undervoltage release

Rated control voltage	U <sub>s</sub>	V	
Rated control voltage	U <sub>s</sub>	V	48 V 50/60 Hz

## 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 7.0

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	48 - 48
Rated control supply voltage Us at AC 60HZ	V	48 - 48
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		Yes
Suitable for off-load switch		Yes
Suitable for motor safety switch		No
Suitable for overload relay		No

## Approvals

Product Standards		UL489; CSA-C22.2 No. 5-09; IEC60947, CE marking
UL File No.		E140305
UL Category Control No.		DIHS
CSA File No.		022086
CSA Class No.		1437-01
North America Certification		UL listed, CSA certified