



**Shunt release for NZM4, configurable relays, 2NO, 110-130AC, Push-in terminals**

**Part no. NZM4-XA2A110-130AC**  
**Catalog No. 189746**

Similar to illustration

## Delivery program

Product range		Accessories
Accessories		Shunt release
Accessories		Shunt release with two relays
Standard/Approval		UL/CSA, IEC
Construction size		NZM4
Description		<p>The breakers are actuated by a voltage pulse or by applying a no-break current. For signaling commands or different states of the circuit-breaker. Two relays per unit.</p> <p>The activation criteria can be configured in the trip unit. Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager.</p> <p>If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on.</p> <p>Only for use in combination with circuit-breakers with electronic trips. Shunt trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, under-voltage trip NZM...-XU... or shunt trip NZM...-XA.</p> <p>Relay coil is controlled by trip unit.</p> <p>Relay contacts for control wiring.</p> <p>Relays can be used for controlling remote operator with <math>U_s=208-204</math> V AC. Control wiring on push-in clamps.</p> <p>Cannot be used with the PXR10 NZM-AX electronic trip.</p>
Connection type		with push in terminal
Auxiliary contacts		without auxiliary contact
For use with		PXR20(25) NZM4(-4)-..X...
Number of relays		2
Contact sequence		

## Technical data

### Shunt release

Rated control voltage	$U_s$	V	
AC	$U_s$	V AC	110 - 130
Operating range			
AC	$x U_s$		0.7 - 1.1
DC	$x U_s$		0.7 - 1.1
Power consumption			
Pick-up AC/DC		VA/W	2.5
Power consumption Pick-up = Sealing		VA/W	2.5
Maximum opening delay (response time until opening of the main contacts)		ms	Approx. 22
Maximum duty factor		ms	$\infty$
Minimum command time		ms	Approx. 10 ... 15
<b>Terminal capacity</b>			
Solid		mm <sup>2</sup>	1 x (0.2 - 1.5)
Stranded		mm <sup>2</sup>	1 x (0.25 - 1.5)
		AWG	1 x (24 - 16)
with insulated end sleeve in accordance with DIN46224 / 4		mm <sup>2</sup>	1 x (0,25 - 1,5)
with uninsulated end sleeve in accordance with DIN46228 / 1		mm <sup>2</sup>	1 x (0,25 - 0,75)

## Relay contacts

Rated control voltage	$U_s$	V	
AC	$U_s$	V AC	24 - 240
DC	$U_s$	V DC	24 - 24
<b>Contacts</b>			
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Rated insulation voltage	$U_i$	V	250
Overtoltage category/pollution degree			III/3
Switching capacity		$kA_{rms}$	
<b>Rated operational current</b>			
AC-1			
24 V	$I_e$	A	1
110 V	$I_e$	A	1
230 V	$I_e$	A	1
DC-1			
24 V	$I_e$	A	1
Min. switching capacity (reference value)			10 ma / 12 V
<b>Connection</b>			
Stripping length		mm	8
<b>Terminal capacity</b>			
Solid		mm <sup>2</sup>	1 x (0.2 – 1.5)
Stranded		mm <sup>2</sup>	1 x (0.25 – 1.5)
		AWG	1 x (24 - 16)
with insulated end sleeve in accordance with DIN46224 / 4		mm <sup>2</sup>	1 x (0,25 - 1,5)
with uninsulated end sleeve in accordance with DIN46228 / 1		mm <sup>2</sup>	1 x (0,25 - 0,75)

## 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) / Shunt release (for power circuit breaker) (EC001023)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Full load current trip (ecl@ss10.0.1-27-37-04-18 [AKF016013])		
Rated control supply voltage Us at AC 50HZ	V	110 - 130
Rated control supply voltage Us at AC 60HZ	V	110 - 130
Rated control supply voltage Us at DC	V	0 - 0
Voltage type for actuating		AC
Initial value of the undelayed short-circuit release - setting range	A	0
End value adjustment range undelayed short-circuit release	A	0
Type of electric connection		Spring clamp 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
Suitable for power circuit breaker		No
Suitable for off-load switch		Yes
Suitable for motor safety switch		Yes
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

## Additional product information (links)

<b>IL01210005Z shunt trip, under-voltage trip, make-before-break auxiliary breaker</b>	
IL01210005Z shunt trip, under-voltage trip, make-before-break auxiliary breaker	<a href="https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL01210005Z2010_10.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL01210005Z2010_10.pdf</a>