

#### Shunt release, 24VAC/DC

Part no. Article no. NZM2/3-XA24AC/DC 259754



Similar to illustration

### **Delivery program**

		Accessories
		Shunt release
		Shunt releases
		UL/CSA, IEC
		NZM2/3
		Switches are tripped by a voltage pulse or by the application of uninterrupted voltage. When the shunt release is energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Undervoltage releases cannot be installed simultaneously with NZMXHIV early-make auxiliary contact or NZMXU shunt release.
		With bolt connection
		without auxiliary contact
Us	V	24 V AC/DC
		NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)
	Us	U <sub>s</sub> V

## **Technical data**

Shunt release			
Rated control voltage	Us	V	
AC	Us	V AC	12 - 440
DC	Us	V DC	12 - 440
Frequency range		Hz	50/60/200/400, DC
Operating range			
AC	x U <sub>s</sub>		0.7 - 1.1
DC	x U <sub>s</sub>		0.7 - 1.1
Power consumption			
Pick-up AC/DC		VA/W	2.5
Sealing AC/DC		VA/W	2.5
Maximum opening delay (response time until opening of the main contacts)		ms	20
Maximum duty factor		ms	~
Minimum command time		ms	10 15
Terminal capacities		mm <sup>2</sup>	
Solid or flexible conductor, with ferrule		mm <sup>2</sup>	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	e product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures	Meets the	e product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the	e 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 6.0**

Low-voltage industrial components (EG000017) / Shunt release (for power circuit breaker) (EC001023)

Electric engineering, automation, process control engineering / Low-voltage sust-/ Circuit becass.1-27-37-04-18 [AKF016010]     Rated control supply voltage Us at AC 50HZ   V   4- 24     Rated control supply voltage Us at AC 60HZ   V   24 - 24     Rated control supply voltage Us at AC 60HZ   V   24 - 24     Voltage type for actuating   V   24 - 24     Voltage type for actuating   V   24 - 24     Initial value of the undelayed short-circuit release - setting range   A   0     Initial value of the undelayed short-circuit release - setting range   A   0     Number of contacts as normally open contact   A   0   0     Number of contacts as normally closed contact   Image: Setting range   0				
Rated control supply voltage Us at AC 60HZ   V   24 - 24     Rated control supply voltage Us at DC   V   24 - 24     Voltage type for actuating   V   24 - 24     Voltage type for actuating   AC/DC     Initial value of the undelayed short-circuit release - setting range   A   0     Initial value of the undelayed short-circuit release   A   0     Indy adjustment range undelayed short-circuit release   A   0     Number of contacts as normally open contact   C   Screw connection     Number of contacts as normally closed contact   Image: Contact with the set of the	Electric engineering, automation, process control engineering / Low-voltage switch	Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Full load current trip (ecl@ss8.1-27-37-04-18 [AKF016010])		
Rated control supply voltage Us at DC   V   24-24     Voltage type for actuating   AC/DC     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   Screw connection   Screw connection     Number of contacts as normally open contact   O   0     Number of contacts as change-over contact   Image: Strew connection   0     Suitable for power circuit breaker   Image: Strew connection   Image: Strew connection     Suitable for off-load switch   Image: Strew connection   Image: Strew connection	Rated control supply voltage Us at AC 50HZ	V	:	24 - 24
Voltage type for actuating   AC/DC     Initial value of the undelayed short-circuit release - setting range   A     End value adjustment range undelayed short-circuit release   A     Type of electric connection   A     Number of contacts as normally open contact   A     Number of contacts as normally closed contact   Image: Contact as normally closed contact     Suitable for power circuit breaker   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as normally closed contact     Suitable for off-load switch   Image: Contact as norm	Rated control supply voltage Us at AC 60HZ	V	:	24 - 24
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   A   0     Number of contacts as normally open contact   A   0     Number of contacts as normally closed contact   C   G     Number of contacts as normally closed contact   C   0     Suitable for optione switch   C   0     Suitable for off-load switch   C   Second	Rated control supply voltage Us at DC	V	:	24 - 24
End value adjustment range undelayed short-circuit release   A   0     Type of electric connection   Screw connection   Screw connection     Number of contacts as normally open contact   O   0     Number of contacts as normally closed contact   O   0     Suitable for power circuit breaker   F   0     Suitable for off-load switch   E   F     Suitable for off-load switch   E   F <td>Voltage type for actuating</td> <td></td> <td></td> <td>AC/DC</td>	Voltage type for actuating			AC/DC
Type of electric connection Mode Screw connection   Number of contacts as normally open contact Mode 0   Number of contacts as normally closed contact Mode 0   Number of contacts as normally closed contact Mode 0   Number of contacts as normally closed contact Mode 0   Number of contacts as normally closed contact Mode 0   Number of contacts as change-over contact Mode Mode   Suitable for off-load switch Mode Mode	Initial value of the undelayed short-circuit release - setting range	А		0
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Number of contacts as normally closed contact Model   Number of contacts as change-over contact Model   Suitable for power circuit breaker Model   Suitable for off-load switch Model	Type of electric connection			Screw connection
Number of contacts as change-over contact Image: Contacts as change-over contact Image: Contacts as change-over contact Image: Contacts as change-over contact   Suitable for off-load switch Image: Contacts as change-over contact Image: Contacts as change-over contact Image: Contacts as change-over contact   Suitable for off-load switch Image: Contacts as change-over contacts Image: Contacts as change-over contacts Image: Contacts as change-over contacts	Number of contacts as normally open contact			0
Suitable for off-load switch Image: Suitable for off-load switch	Number of contacts as normally closed contact			0
Suitable for off-load switch Yes	Number of contacts as change-over contact			0
	Suitable for power circuit breaker		,	Yes
Suitable for motor safety switch No	Suitable for off-load switch		,	Yes
	Suitable for motor safety switch			No
Suitable for overload relay 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

## Additional product information (links)

#### IL01208005Z (AWA1230-1915) Shunt release, Undervoltage release, Early-make auxiliary contact

IL01208005Z (AWA1230-1915) Shunt release, Undervoltage release, Early-make auxiliary contact ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL01208005Z2011\_08.pdf