# DATASHEET - NZM2/3-XAHIV12AC/DC

Part no.



Shunt release, 12VAC/DC, +1early N/O

NZM2/3-XAHIV12AC/DC Catalog No. 259808



Similar to illustration

**Delivery program** 

		Accessories
		Shunt release
		Shunt releases
		UL/CSA, IEC
		NZM2/3
		Cannot be used in conjunction with NZMXR remote operator.  If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on.  Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms.  Shunt releases cannot be installed simultaneously with NZMXHIV early-make auxiliary contact or NZMXU undervoltage release.
		With bolt connection
		with early-make auxiliary contact
$U_s$	V	12 V AC/DC
		NZM2(-4), N(S)2(-4) NZM3(-4), N(S)3(-4)
	$U_{S}$	U <sub>s</sub> V

## **Technical data**

#### **Shunt release**

Siluit leiease			
Rated control voltage	U <sub>s</sub>	V	
AC	Us	V AC	12 - 12
DC	U <sub>s</sub>	V DC	12 - 12
Frequency range		Hz	50/60/200/400, DC
Operating range			
AC	$x U_s$		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		$\mathrm{mm}^2$	
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 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 mus observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must 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) / 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 12 - 12 ٧ 12 - 12 Rated control supply voltage Us at AC 60HZ ٧ 24 - 24 Rated control supply voltage Us at DC AC/DC Voltage type for actuating Initial value of the undelayed short-circuit release - setting range Α 0 End value adjustment range undelayed short-circuit release Α 0 Type of electric connection Screw connection Number of contacts as normally open contact 1 Number of contacts as normally closed contact 0 0 Number of contacts as change-over contact Suitable for power circuit breaker Yes Suitable for off-load switch Yes Suitable for motor safety switch No Suitable for overload relay No

## **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 https://es-assets.eaton.com/DOCUMENTATION/AWA\_INSTRUCTIONS/IL01208005Z2018\_02.pdf