DATASHEET - NZM4-XA48AC/DC



Shunt release, 48VAC/DC

Part no. NZM4-XA48AC/DC Catalog No. 266448



Delivery program

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Product range			Accessories	
Accessories			Shunt release	
Accessories			Shunt releases	
Standard/Approval			UL/CSA, IEC	
Construction size			NZM4	
Description			Switches are tripped by a voltage pulse or by the application of uninterrupted voltage. If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on. Shunt releases cannot be installed simultaneously with NZMXHIV early-make auxiliary contact or NZMXU undervoltage release.	
Connection type			With bolt connection	
Auxiliary contacts			without auxiliary contact	
Rated control voltage	U_s	V	48 V AC/DC	
For use with			NZM4(-4), N(S)4(-4)	

Technical data

Shunt release

AC DC Us V DC 48 - 48 Frequency Dperating range AC	Shuff refease			
DC	Rated control voltage	U_s	V	
Frequency Doperating range AC	AC	U_s	V AC	48 - 48
Deperating range AC AC XUs Us 0.7 - 1.1 DC XUs 0.7 - 1.1 Power consumption Pick-up AC/DC Power consumption Pick-up = Sealing Maximum opening delay (response time until opening of the main contacts) Maximum duty factor Minimum command time Terminal capacities Minimum conductor, with ferrule Solid or flexible conductor, with ferrule MWG 1 x(0,75 - 2,5) 2 x (0,75 - 2,5) 3 x (0,75 - 2,5) 4 WG 1 x (18 14)	DC	Us	V DC	48 - 48
AC	Frequency		Hz	50/60/200/400, DC
DC x U _s 0.7 - 1.1 Power consumption Pick-up AC/DC Power consumption Pick-up = Sealing Maximum opening delay (response time until opening of the main contacts) Maximum duty factor Minimum command time Solid or flexible conductor, with ferrule Terminal capacities MWG 1 x (18 14)	Operating range			
Power consumption Pick-up AC/DC VA/W V	AC	xU_{s}		0.7 - 1.1
Pick-up AC/DC Power consumption Pick-up = Sealing VA/W V	DC	x U _s		0.7 - 1.1
Power consumption Pick-up = Sealing VA/W 2.5 Maximum opening delay (response time until opening of the main contacts) ms ≥2 Maximum duty factor ms 10 15 Terminal capacities mm² Solid or flexible conductor, with ferrule mm² 1 x (0,75 - 2,5) 2 x (0,75 - 2,5) 4 WG 1 x (18 14)	Power consumption			
Maximum opening delay (response time until opening of the main contacts) ms ∞ Minimum command time ms 10 15 Terminal capacities mm² Solid or flexible conductor, with ferrule mm² 1 x (0,75 - 2,5) 2 x (0,75 - 2,5) 4 WG 1 x (18 14)	Pick-up AC/DC		VA/W	2.5
Maximum duty factor ms	Power consumption Pick-up = Sealing		VA/W	2.5
Minimum command time ms 10 15 Terminal capacities mm² Solid or flexible conductor, with ferrule mm² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) AWG 1 x (18 14)	Maximum opening delay (response time until opening of the main contacts)		ms	22
Terminal capacities mm² Solid or flexible conductor, with ferrule mm² 1 x (0,75 - 2,5) 2 x (0,75 - 2,5) 2 x (0,75 - 2,5) AWG 1 x (18 14)	Maximum duty factor		ms	00
Solid or flexible conductor, with ferrule mm² 1 x (0,75 - 2,5) 2 x (0,75 - 2,5) AWG 1 x (18 14)	Minimum command time		ms	10 15
AWG 2 x (0,75 - 2,5) AWG 1 x (18 14)	Terminal capacities		mm^2	
	Solid or flexible conductor, with ferrule		mm ²	
			AWG	

Design verification as per IEC/EN 61439

Design vermountain as per 120/211 01-103	
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) / 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 48 - 48 48 - 48 Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at DC 48 - 48 Voltage type for actuating AC/DC Initial value of the undelayed short-circuit release - setting range 0 Α Α End value adjustment range undelayed short-circuit release n Type of electric connection Screw connection 0 Number of contacts as normally open contact Number of contacts as normally closed contact 0 Number of contacts as change-over contact 0 Yes Suitable for power circuit breaker Suitable for off-load switch Yes No Suitable for motor safety switch 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)

IL01210005Z (AWA1230-2027) Shunt release, Undervoltage release, Early-make auxiliary contact

IL01210005Z (AWA1230-2027) Shunt release, Undervoltage release, Early-make auxiliary contact https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL01210005Z2010_10.pdf