DATASHEET - NZM1-XA12AC/DC

Shunt release, 12VAC/DC

Part no. NZM1-XA12AC/DC
Catalog No. 259706

Powering Business Worldwide™

Similar to illustration

Delivery program

Product range			Accessories
Accessories			Shunt release
Accessories			Shunt releases
Standard/Approval			UL/CSA, IEC
Construction size			NZM1
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 NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.
Connection type			with terminal block on the left-hand switch side
Auxiliary contacts			without auxiliary contact
Rated control voltage	U_s	V	12 V AC/DC
For use with			NZM1(-4), N(S)1(-4)

Technical data

Shunt release

Rated control voltage	U_s	V	
AC	U_s	V AC	12 - 12
DC	U_s	V DC	12 - 12
Frequency		Hz	50/60/200/400, DC
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	20
Maximum duty factor		ms	∞
Minimum command time		ms	10 … 15
Terminal capacities		mm^2	
Solid or flexible conductor, with ferrule		mm^2	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 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.

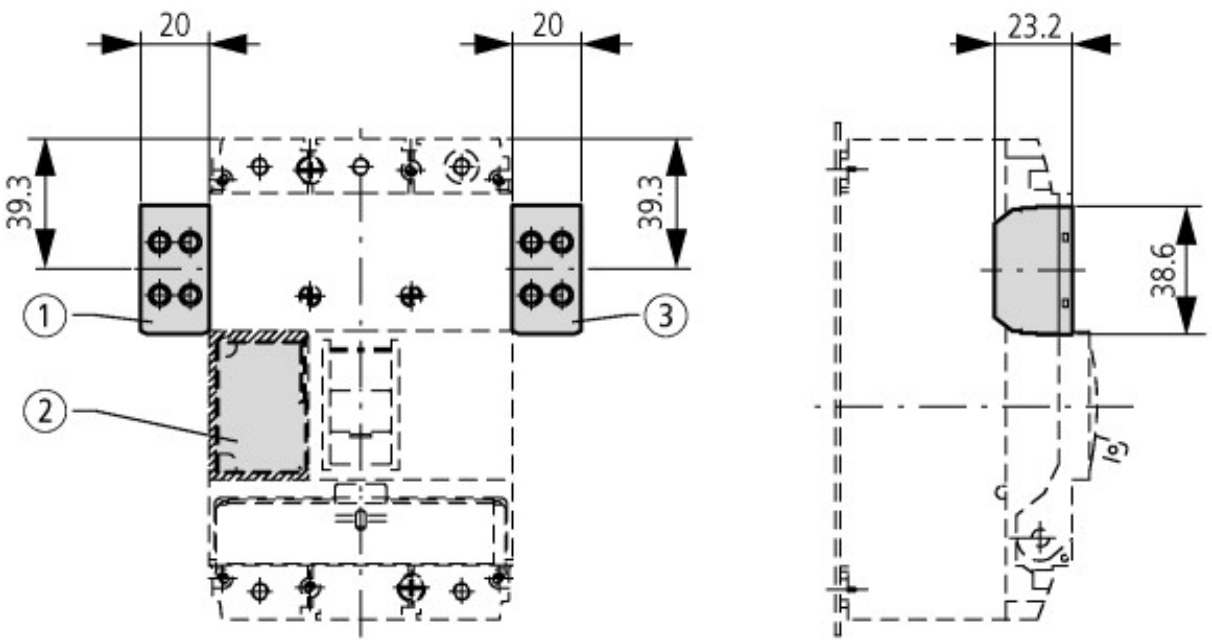
Technical data ETIM 7.0

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		V	12 - 12
Rated control supply voltage Us at AC 60HZ		V	12 - 12
Rated control supply voltage Us at DC		V	12 - 12
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
Number of contacts as normally open contact			0
Number of contacts as normally closed contact			0
Number of contacts as change-over contact			0
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

Dimensions



①
NZM1-XA(HIV)
NZM1-XU(HIV)(20)
NZM1-XHIV
②
NZM1-XA(HIV)(L)
NZM1-XU(V)(HIV)(L)(20)
NZM1-XHIV(L)
③
NZM1-XHIVR

Additional product information (links)

IL01203002Z (AWA1230-1914) Shunt release, Undervoltage release, Early-make auxiliary contact	
IL01203002Z (AWA1230-1914) Shunt release, Undervoltage release, Early-make auxiliary contact	https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL01203002Z2010_11.pdf