

Shunt release, 110-130VAC/DC, +1early N/O

Powering Business Worldwide*

Part no. NZM1-XAHIV110-130AC/DC Article no. 259780

Similar to illustration

\mathbf{I}	INCEN	program
	IIVEIV	IIII IIII III AIII
		pioqidiii

Product range			Accessories
Accessories			Shunt release
Accessories			Shunt releases
Standard/Approval			UL/CSA, IEC
Construction size			NZM1
Description			Cannot be used in conjunction with NZMXR remote operator. When the shunt release is energized, accidental contact with the main contacts of the switch during attempts to switch on is safely prevented. Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms. Undervoltage releases cannot be installed simultaneously with NZMXHIV early-make auxiliary contact or NZMXU shunt release.
Connection type			with terminal block on the left-hand switch side
Auxiliary contacts			with early-make auxiliary contact
Rated control voltage	U_S	V	110 - 130 V AC/DC
For use with			NZM1(-4), N(S)1(-4)

Technical data

Shunt release

AC Us VAC 12 - 440 DC V DC 12 - 440 Frequency range Operating range AC XUs VBC VBC VBC AC XUs VBC VBC TOPOWER consumption Pick-up AC/DC Sealing AC/DC Maximum opening delay (response time until opening of the main contacts) Maximum duty factor Minimum command time VAC 12 - 440 12 - 440 12 - 440 13 - 440 14 - 40 15 - 440 16 - 40 17 - 1.1 18 - 40 18 - 40 19 -				
DC Frequency range Operating range AC X U _S	Rated control voltage	Us	V	
Frequency range Operating range AC	AC	U_s	V AC	12 - 440
Operating range AC AC XUs 0.7 - 1.1 DC XUS 0.7 - 1.1 Power consumption Pick-up AC/DC Sealing AC/DC VA/W Sealing AC/DC Maximum opening delay (response time until opening of the main contacts) Maximum duty factor Minimum command time Terminal capacities Solid or flexible conductor, with ferrule Maximum opening delay (response time until opening of the main contacts) Maximum duty factor ms 20 ms 10 15 mm² 1x (0.75 - 2.5) 2x (0.75 - 2.5) 2x (0.75 - 2.5) AWG 1x (18 14)	DC	U_s	V DC	12 - 440
AC $\times U_{S}$ 0.7 - 1.1 DC $\times U_{S}$ 0.7 - 1.1 Power consumption Pick-up AC/DC $\times V_{A}$ 2.5 Sealing AC/DC $\times V_{A}$ 2.5 Maximum opening delay (response time until opening of the main contacts) Maximum duty factor $\times V_{A}$ 2.5 Minimum command time $\times V_{A}$ 10 15 Terminal capacities $\times V_{A}$ 1x (0.75 - 2.5) 2x (0.75 - 2.5) AWG 1x (18 14)	Frequency range		Hz	50/60/200/400, DC
DC x U _s Power consumption Pick-up AC/DC Sealing AC/DC Maximum opening delay (response time until opening of the main contacts) Maximum duty factor Minimum command time Solid or flexible conductor, with ferrule x U _s x U _s 0.7 - 1.1 VA/W 2.5 VA/W 2.5 ms 20 ms in 15 mm² 1 15 mm² 1 x (0,75 - 2,5) 2 x (0,75 - 2,5) AWG 1 x (18 14)	Operating range			
Power consumption Pick-up AC/DC Sealing AC/DC Maximum opening delay (response time until opening of the main contacts) Maximum duty factor Minimum command time Terminal capacities Solid or flexible conductor, with ferrule More and a summand time Terminal capacities Maximum duty factor Maxim	AC	x U _s		0.7 - 1.1
Pick-up AC/DC Sealing AC/DC VA/W 2.5 Maximum opening delay (response time until opening of the main contacts) Maximum duty factor ms ∞ Minimum command time ms 10 15 Terminal capacities mm² Solid or flexible conductor, with ferrule mm² 1x (0,75 - 2,5) 2x (0,75 - 2,5) 4WG 1x (18 14)	DC	x U _s		0.7 - 1.1
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 mm² Solid or flexible conductor, with ferrule mm² 1x (0,75 - 2,5) 2x (0,75 - 2,5) AWG 1x (18 14)	Power consumption			
Maximum opening delay (response time until opening of the main contacts) Maximum duty factor 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) AWG 1 x (18 14)	Pick-up AC/DC		VA/W	2.5
Maximum duty factor 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) AWG 1 x (18 14)	Sealing AC/DC		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	20
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)	Maximum duty factor		ms	∞
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)	Minimum command time		ms	10 15
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

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.

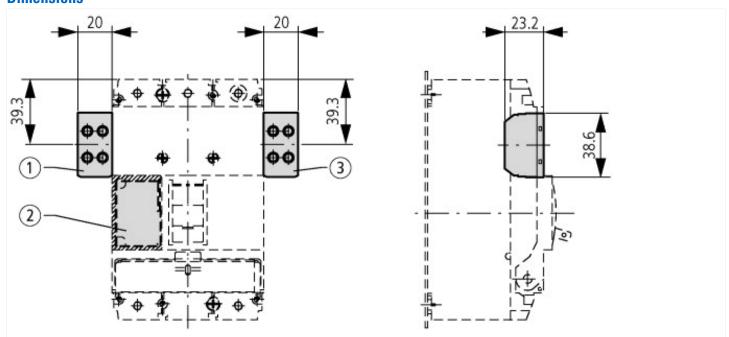
Technical data ETIM 6.0

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@ss8.1-27-37-04-18 [AKF016010])			
Rated control supply voltage Us at AC 50HZ		٧	110 - 130
Rated control supply voltage Us at AC 60HZ		٧	110 - 130
Rated control supply voltage Us at DC		٧	110 - 130
Voltage type for actuating			AC/DC
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
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)

NZM1-X

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 ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01203002Z2010_11.pdf