DATASHEET - NZM1-XAHIV380-440AC/DC



Shunt release, 380-440VAC/DC, +1early N/O

Part no. NZM1-XAHIV380-440AC/DC Catalog No. 259784



Similar to illustration

Delivery program	
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. 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.

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 U_{s}

with terminal block on the left-hand switch side

with early-make auxiliary contact

380 - 440 V AC/DC

NZM1(-4), N(S)1(-4)

Technical data

Shunt release

Connection type

Auxiliary contacts

Rated control voltage
For use with

AC Us V AC 380 - 440 DC Us 380 - 440 Frequency range Operating range AC XUs 0.7 - 1.1 DC xUs 0.7 - 1.1 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 V AC 380 - 440 AB 2 50/60/200/400, DC 0.7 - 1.1	Shullt release			
DC Frequency range Departing range AC XU _S XU _S 0.7 - 1.1 DC XU _S 0.7 - 1.1 DC XU _S 0.7 - 1.1 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 Maximum duty factor Minimum command time Solid or flexible conductor, with ferrule AWG AWG 1 x (18 14)	Rated control voltage	Us	V	
Frequency range Operating range AC X U _S X U _S 0.7 - 1.1 DC 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 Hz 50/60/200/400, DC AU 0.7 - 1.1 VA/W 2.5 VA/W 2.5 WS 20 ms 20 ms 10 15 mm² 1 × (0.75 - 2.5) 2 × (0.75 - 2.5) 2 × (0.75 - 2.5) 4 WG 1 × (18 14)	AC	U_s	V AC	380 - 440
Operating range AC	DC	U _s	V DC	380 - 440
AC	Frequency range		Hz	50/60/200/400, DC
DC x U _s 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 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)	Operating range			
Power consumption Pick-up AC/DC Sealing AC/DC Wa/W Va/W Va/W	AC	$x U_s$		0.7 - 1.1
Pick-up AC/DC Sealing AC/DC VA/W	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 1 x (0,75 - 2,5) 2 x (0,75 - 2,5) AWG 1 x (18 14)	Power consumption			
Maximum opening delay (response time until opening of the main contacts) ms	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 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 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

EC/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.

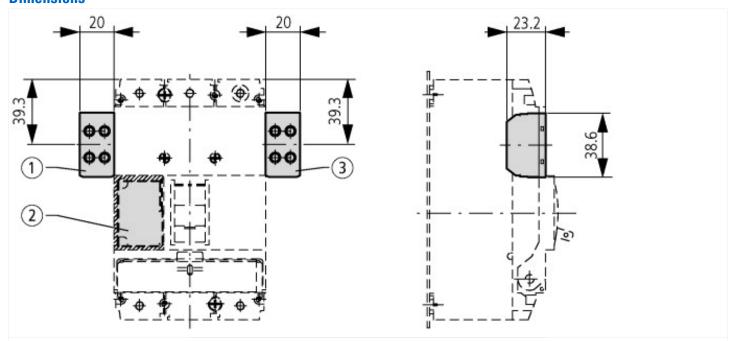
Technical data ETIM 7.0

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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	380 - 440	
Rated control supply voltage Us at AC 60HZ		V	380 - 440	
Rated control supply voltage Us at DC		V	380 - 440	
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

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