DATASHEET - NZM2/3-XUHIV2A24AC

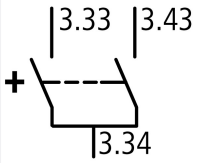
Similar to illustration

Undervoltage release for NZM2/3, configurable relays, 2NO, 1 early-make auxiliary contact, 1NO, 24AC, Push-in terminals

Powering Business Worldwide™

Part no. NZM2/3-XUHIV2A24AC
Catalog No. 189732

Delivery program

Product range			Accessories
Accessories			Undervoltage release
Accessories			Undervoltage release with early-make auxiliary contact and two relays
Standard/Approval			UL/CSA, IEC
Construction size			NZM2/3
Description			For interlock circuits and load-shedding circuits as well as make-before-break interruption of the shunt trip for primary breaker use. Instantaneous shut-off of the NZM circuit breaker when the control voltage drops below 35 - 70% Us. For use with emergency-stop devices in connection with an emergency-stop button. For signalizing commands or different states of the circuit-breaker. Two relays per unit. The activation criteria can be configured in the trip unit. Configuration via communication or circuit breaker display or front USB port and Eaton Power Xpert Protection Manager. When the under-voltage trip is switched off, accidental contact with the circuit breaker's primary contacts is prevented when switched on. Make-before-break activation of auxiliary contact when switching on and off (manual operation): approx. 20 ms (NZM2/3) and 90 ms (NZM4). Only for use in combination with circuit-breakers with electronic trips. Cannot be used in conjunction with NZM...-XR... remote operator. Under-voltage trip relay modules cannot be installed simultaneously with make-before-break auxiliary contact NZM...-XHIV, under-voltage trip NZM...-XU... or shunt trip NZM...-XA. Relay coil is controlled by trip unit. Relay contacts for control wiring. Relays can be used for controlling remote operator with Us=208-204 V AC. Control wiring on push-in clamps. Cannot be used with the PXR10 NZM-AX electronic trip.
Connection type			with push in terminal
Auxiliary contacts			With early-make auxiliary contact and 2 relays
For use with			PXR20(25) NZM2(-4)-..X… PXR20(25) NZM3(-4)-..X…
Number of relays			2
Contact sequence			

Technical data

Undervoltage release

Rated control voltage	U_s	V	
AC	U_s	V AC	24 - 24
Operating range			
Drop-out voltage		x U_s	0.35 - 0.7
Pick-up voltage	x Uc		0.85 - 1.1
Power consumption			
AC			
Pick-up AC		VA	1.5
Sealing AC		VA	1.5

DC		x U_s	
Pick-up DC		W	0.8
Sealing DC		W	0.8
Maximum opening delay (response time until opening of the main contacts)		ms	19
Minimum command time		ms	10 - 15
Terminal capacity			
Solid		mm^2	1 x (0.2 – 1.5)
Stranded		mm^2	1 x (0.25 – 1.5)
		AWG	1 x (24 - 16)
with insulated end sleeve in accordance with DIN46224 / 4		mm^2	1 x (0,25 - 1,5)
with uninsulated end sleeve in accordance with DIN46228 / 1		mm^2	1 x (0,25 - 0,75)

Relay contacts

Rated control voltage	U_s	V	
AC	U_s	V AC	24 - 240
DC	U_s	V DC	24 - 24
Contacts			
Rated impulse withstand voltage	U_{imp}	V AC	4000
Rated insulation voltage	U_i	V	250
Overvoltage category/pollution degree			II/2
Switching capacity		kA_{rms}	
Rated operational current			
AC–1			
24 V	I_e	A	1
110 V	I_e	A	1
230 V	I_e	A	1
DC-1			
24 V	I_e	A	1
Min. switching capacity (reference value)			0.1 mA / 0.1 VDC
Connection			
Stripping length		mm	8
Terminal capacity			
Solid		mm^2	1 x (0.2 – 1.5)
Stranded		mm^2	1 x (0.25 – 1.5)
		AWG	1 x (24 - 16)
with insulated end sleeve in accordance with DIN46224 / 4		mm^2	1 x (0,25 - 1,5)
with uninsulated end sleeve in accordance with DIN46228 / 1		mm^2	1 x (0,25 - 0,75)

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) / Under voltage coil (EC001022)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Undervoltage trip (ecl@ss10.0.1-27-37-04-17 [AKF015013])			
Rated control supply voltage Us at AC 50HZ		V	24 - 24
Rated control supply voltage Us at AC 60HZ		V	24 - 24
Rated control supply voltage Us at DC		V	0 - 0
Voltage type for actuating			AC
Type of electric connection			Spring clamp connection
Number of contacts as normally open contact			3
Number of contacts as normally closed contact			0
Number of contacts as change-over contact			0
Delayed			No
Suitable for power circuit breaker			Yes
Suitable for off-load switch			Yes
Suitable for motor safety switch			Yes
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)

IL012141ZU shunt trip, under-voltage trip, leading auxiliary contact	
IL012141ZU shunt trip, under-voltage trip, leading auxiliary contact	https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL012141ZU2020_03.pdf