### **DATASHEET - NZM2-XRD110-130DC**



Remote operator, 110-130VDC, standard

Part no. NZM2-XRD110-130DC Catalog No. 115394



Similar to illustration

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Delivery program			
Product range			Accessories
Accessories			Remote operator, standard
Rated operating frequency			DC
Standard/Approval			UL/CSA, IEC
Construction size			NZM2
Description			For remote switching of circuit-breakers and switch-disconnectors.
			ON and OFF switching and resetting by means of two-wire or three-wire control.
			Local switching by hand possible.
			Lockable in the 0 position of the remote operator with up to 3 padlocks (hasp thickness: 4 – 8 mm)
			Please note during engineering: Terminal 70/71: NZM-XR: Contact loading according to technical data NZM2-XRD: Full current flows through the contact during make and break! RMQ series contact elements can be used for the NZM2(3.4)-XR(D)remote operators.
			Terminal 75:  NZM-XR: Operational readiness signal when cover closed and not locked.  NZM2-XRD: Operational readiness signal when sliding switch set to Auto.  Sliding switch with three positions: Manual/Auto/Locked for reliable differentiation of connected positions.  AC-15: 400 V; 2 A DC-13: 220 V; 0.2 A
			Three-wire control with automatic reset to the 0 position after the switch has tripped $ \begin{array}{cccc}  & & & & & & & & & & & & & & & \\  & & & &$
Closing delay		ms	110 – 170
Break time		ms	110 – 170
ated control voltage	$U_s$	٧	110 - 130 V DC
lumber of poles	-		3/4 pole
or use with			NZM2(-4) N(S)2(-4)
Project planning information			Sliding switch for "Auto" or "Manual"  Max. number auxiliary contacts: 2 standard auxiliary contacts, 1 trip-indicating auxiliary switches  Cannot be combined with switch-disconnector PN  Cannot be combined with mechanical interlock

	Do not install M22-CK11(20/02) dual auxiliary contacts in the center auxiliary contact slot in NZM2-XRD
Engineering information (sheet catalog)	2/3-wire control and circuit diagrams

#### **Technical data**

### Remote operator

Rated control voltage	Us	V	
DC	$U_s$	V DC	110 - 130
Operating range			
AC		$x  U_s$	0.85 - 1.1
DC		$x  U_s$	0.85 - 1.1
Motor rating			
DC			
24 V 30 V DC	Р	W	450
Minimum signal duration			
with switch on		ms	100
with switch off		ms	100
Lifespan, mechanical	Operations		20000
Maximum operating frequency		Ops./h	
Max. operating frequency		Ops/h	120
Terminal capacities		$\text{mm}^2$	
Solid or flexible conductor, with ferrule		mm <sup>2</sup>	0,75 - 2,5
		AWG	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) / Motor operator for power circuit-breaker (EC001030)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Electrical drive for circuit breakers (ecl@ss10.0.1-27-37-04-12 [AKF010013])		
Type of switch drive		Motor drive
Rated control supply voltage Us at AC 50HZ	V	0 - 0
Rated control supply voltage Us at AC 60HZ	V	0 - 0
Rated control supply voltage Us at DC	V	110 - 130
Voltage type for actuating		DC

# 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)

IL01219025Z (AWA1230-2405) remote operator direct NZM2		
IL01219025Z (AWA1230-2405) remote operator direct NZM2	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01219025Z2019_05pdf	
2/3-wire control and circuit diagrams	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.153	