



Remote operator, 110-130VDC, standard

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

Similar to illustration

**Delivery program**

Product range			Accessories
Accessories			Remote operator, standard
Rated operating frequency			DC
Standard/Approval			UL/CSA, IEC
Construction size			NZM2
Description			<p>For remote switching of circuit-breakers and switch-disconnectors.</p> <p>ON and OFF switching and resetting by means of two-wire or three-wire control.</p> <p>Local switching by hand possible.</p> <p>Lockable in the 0 position of the remote operator with up to 3 padlocks (hasp thickness: 4 – 8 mm)</p> <p><b>Three-wire control</b></p> <p>Please note during engineering:                  Terminal 70/71:  <b>NZM-XR:</b> Contact loading according to technical data  <b>NZM2-XRD:</b> 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.</p> <p><b>Two-wire control</b></p> <p>Terminal 75:  <b>NZM-XR:</b> Operational readiness signal when cover closed and not locked.  <b>NZM2-XRD:</b> 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</p> <p><b>Three-wire control with automatic reset to the 0 position after the switch has tripped</b></p> <p>Switching cycle:</p> <p><b>Parallel remote operator connection</b></p>
Closing delay		ms	110 – 170
Break time		ms	110 – 170
Rated control voltage	$U_s$	V	110 - 130 V DC
Number of poles			3/4 pole
For use with			NZM2(-4) N(S)2(-4)
Project planning information			<p>Sliding switch for "Auto" or "Manual"</p> <p>Max. number auxiliary contacts: 2 standard auxiliary contacts, 1 trip-indicating auxiliary switches</p> <p>Cannot be combined with switch-disconnector PN...</p> <p>Cannot be combined with mechanical interlock</p>

		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	U <sub>s</sub>	V	
DC	U <sub>s</sub>	V DC	110 - 130
Operating range			
AC		x U <sub>s</sub>	0.85 - 1.1
DC		x U <sub>s</sub>	0.85 - 1.1
Motor rating			
DC			
24 V ... 30 V DC	P	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		mm <sup>2</sup>	
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)

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)

<b>IL01219025Z (AWA1230-2405) remote operator direct NZM2</b>	
IL01219025Z (AWA1230-2405) remote operator direct NZM2	<a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01219025Z2019_05_.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01219025Z2019_05_.pdf</a>
2/3-wire control and circuit diagrams	<a href="http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=17.153">http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=17.153</a>