



Remote operator, 110-130VAC, standard

Part no. **NZM2-XRD110-130AC**  
 Catalog No. **115390**



Similar to illustration

**Delivery program**

|                              |       |    |   |
|------------------------------|-------|----|---|
| Product range                |       |    | Accessories   |
| Accessories                  |       |    | Remote operator, standard   |
| Rated operating frequency    |       |    | AC 50/60 Hz   |
| 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:<br/>                 Terminal 70/71:<br/> <b>NZM-XR:</b> Contact loading according to technical data<br/> <b>NZM2-XRD:</b> Full current flows through the contact during make and break!<br/>                 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:<br/> <b>NZM-XR:</b> Operational readiness signal when cover closed and not locked.<br/> <b>NZM2-XRD:</b> Operational readiness signal when sliding switch set to Auto.<br/>                 Sliding switch with three positions: Manual/Auto/Locked for reliable differentiation of connected positions.<br/>                 AC-15: 400 V; 2 A<br/>                 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 50/60 Hz  |
| Number of poles              |       |    | 3/4 pole  |
| For use with                 |       |    | NZM2(-4)<br>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                     | $U_s$      | V               |            |
| AC  | $U_s$      | V AC            | 110 - 130  |
| Operating range                           |            |                 |            |
| AC  |            | $x U_s$         | 0.85 - 1.1 |
| DC  |            | $x U_s$         | 0.85 - 1.1 |
| Motor rating                              |            |                 |            |
| AC  |            |                 |            |
| 110 V ... 130 V AC                        | S          | VA              | 550        |
| 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 | 110 - 130   |
| Rated control supply voltage Us at AC 60HZ | V | 110 - 130   |
| Rated control supply voltage Us at DC      | V | 0 - 0       |
| Voltage type for actuating                 |   | AC          |

## 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>                 |