



115393  
NZM2-XRD24-30DC

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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

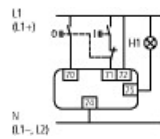
Description  
For remote switching of circuit-breakers and switch-disconnectors.  
  
ON and OFF switching and resetting by means of two-wire or three-wire control.  
  
Local switching by hand possible.  
  
Lockable in the 0 position of the remote operator

with up to 3 padlocks (hasp thickness: 4 – 8 mm)

Please note during engineering:

### Three-wire control

Terminal 70/71:



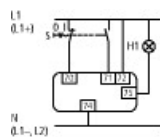
**NZM-XR** Contact loading according to technical data

**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.

### Two-wire control

Terminal 75:



**NZM-XR** Operational readiness signal when cover closed and not locked.

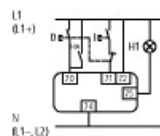
**NZM2-XRD**: Operational readiness signal when sliding switch set to Auto.

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



Switching cycle:



### Parallel remote operator connection



Closing delay  
110 – 170 ms

Break time  
110 – 170 ms

Rated control voltage [ $U_s$ ]  
24 - 30 V DC V

Number of poles  
3/4 pole

For 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 [ $U_s$  ]  
DC [ $U_s$  ]  
24-30 V DC

Operating range  
AC  
0.85 - 1.1 x  $U_s$

Operating range  
DC  
0.85 - 1.1 x  $U_s$

Motor rating  
DC  
24 V ... 30 V DC [P]  
450 W

Minimum signal duration  
with switch on  
100 ms

Minimum signal duration  
with switch off  
100 ms

Lifespan, mechanical [Operations]  
20000

Maximum operating frequency  
Max. operating frequency  
120 Ops/h

Terminal capacities  
Solid or flexible conductor, with ferrule  
0,75 - 2,5 mm<sup>2</sup>

Terminal capacities  
18 ... 14 AWG

## 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 Strength of materials and parts  
10.2.3.1 Verification of thermal stability of enclosures  
Meets the product standard's requirements.

10.2 Strength of materials and parts  
10.2.3.2 Verification of resistance of insulating materials to normal heat  
Meets the product standard's requirements.

10.2 Strength of materials and parts  
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 Strength of materials and parts  
10.2.4 Resistance to ultra-violet (UV) radiation  
Meets the product standard's requirements.

10.2 Strength of materials and parts  
10.2.5 Lifting  
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts  
10.2.6 Mechanical impact  
Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts  
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 Insulation properties  
10.9.3 Impulse withstand voltage  
Is the panel builder's responsibility.

10.9 Insulation properties  
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 (ec1@ss10.0.1-27-37-04-12 [AKF010013])

Type of switch drive  
Motor drive

Rated control supply voltage  $U_s$  at AC 50-HZ  
0 - 0 V

Rated control supply voltage  $U_s$  at AC 60Hz  
0 - 0 V

Rated control supply voltage  $U_s$  at DC  
24 - 30 V

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

## DIMENSIONS

