## DATASHEET - NZM2-XR208-240AC



Remote operator, 208-240VAC, for size 2

Part no. Catalog No. NZM2-XR208-240AC 259832

0004358776



EL-Nummer (Norway)

### **Delivery program**

Product range	Accessories
Accessories	Remote operator, can be synchronized
Rated operating frequency	AC 50/60 Hz
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:  $4-8\mbox{ mm})$ 

Can be synchronized

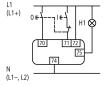
#### Three-wire control

Two-wire control

0.1

(L1+)

(L1-, L2)



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



Switching cycle: NZM2-XR  $\begin{bmatrix} 0 & 0 & 0 \\ 0 & -1 & 0 \end{bmatrix} \rightarrow \begin{bmatrix} 1 \rightarrow 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix} \xrightarrow{0} \begin{bmatrix} 0 & 0 & 0 \\ 0 & -1 & 0 \\ 0 & -1 & 0 \end{bmatrix}$ NZM3-XR  $\begin{bmatrix} 0 & 0 & 1 \\ 0 & -1 & 0 \\ 0 & -1 & 0 \end{bmatrix} \rightarrow \begin{bmatrix} 1 \rightarrow 0 & 0 \\ 0 & 0 & 0 \\ 0 & -1 & 0 \end{bmatrix} \xrightarrow{0} \begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & -1 & 0 \end{bmatrix}$ 

NZM3-XR  $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$ NZM4-XR  $\overrightarrow{Orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$   $\overrightarrow{orr}$ 

The time interval between OFF and ON is 3 seconds. On commands received during the time interval are ignored within the first 3 seconds after switch off.

## Parallel remote operator connection

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Closing delay		ms	60
Break time		ms	300
Rated control voltage	Us	V	208 - 240 V 50/60 Hz
Number of poles			3/4 pole
For use with			NZM2(-4)

			N(S)2(-4)
Project planning information			Cannot be combined with switch-disconnector PN 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	
AC	Us	V AC	208 - 240
Operating range			
AC		$\rm x \ U_{\rm s}$	0.85 - 1.1
DC		x U <sub>s</sub>	0.85 - 1.1
Motor rating			
AC			
110 V 130 V AC	S	VA	350
Minimum signal duration			
with switch on		ms	30
with switch off		ms	150
Lifespan, mechanical	Operations		20000
Maximum operating frequency		Ons /h	

aximum operating frequency	Ops./h	
Max. operating frequency	Ops/h	120
erminal 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.

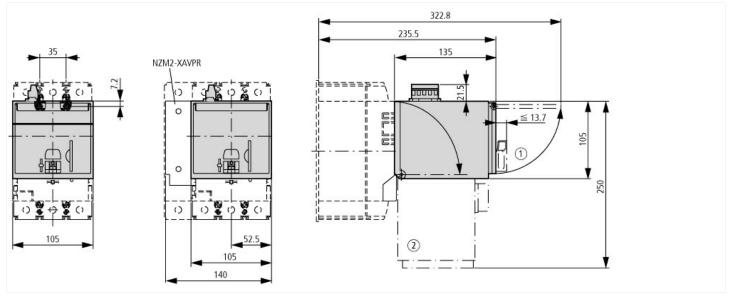
## **Technical data ETIM 7.0**

Low-voltage industrial components (EG000017) / Motor operator for power circuit-breaker (EC001030)		
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	208 - 240
Rated control supply voltage Us at AC 60HZ	V	208 - 240
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

## **Dimensions**



# Additional product information (links)

 IL01206002Z (AWA1230-1984) NZM2 remote operator

 IL01206002Z (AWA1230-1984) NZM2 remote operator

 operator

 2/3-wire control and circuit diagrams

 http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.153