# DATASHEET - NZM3-XR48-60DC



Remote operator, 48-60VDC, for size 3

Part no. Catalog No.

NZM3-XR48-60DC 259856



Similar to illustration

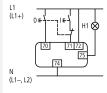
# Delivery program Product range Accessories Accessories Remote operator, can be synchronized Rated operating frequency DC Standard/Approval UL/CSA, IEC Construction size NZM3 Description For remote switching of circuit-breakers and switch-disconnectors. ON and OFF switching and resetting by means of 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



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.

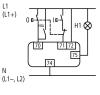
## Terminal 75:

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:	
$NZM2\text{-}XR}\overset{\bullet^{\mathrm{60ms}}\rightarrow I}{\overset{\bullet}{\underset{OFF}}}\rightarrowI$	
$NZM3-XR^{\fbox{0} \xrightarrow[OFF ON]{} \rightarrow \texttt{I}} \xrightarrow[OFF ON]{} \rightarrow$	$I \rightarrow O$ $ON OFF$ $t > 3 S$ $O \rightarrow I$ OFF ON
100 ms	t > 3 s 100 ms

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

Closing delay		ms	80
Break time		ms	1000
Rated control voltage	Us	V	48 - 60 V DC
Number of poles			3/4 pole

04/05/2020

For use with

Project planning information

Engineering information (sheet catalog)

NZM3(-4) N(S)3(-4)

Cannot be combined with switch-disconnector PN... M22-CK11(20/02) dual auxiliary switch cannot be combined with NZM3-XR... remote operator

2/3-wire control and circuit diagrams

# Technical data

Remote operator			
Rated control voltage	Us	V	
DC	Us	V DC	48 - 60
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	Р	W	250
Minimum signal duration			
with switch on		ms	30
with switch off		ms	250
Lifespan, mechanical	Operations		15000
Maximum operating frequency		Ops./h	
Max. operating frequency		Ops/h	60
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       Image: Comparison of the state of the stat		
10.2.2 Corosion resistance       Meets the product standard's requirements.         10.2.3.1 Varification of thermal stability of enclosures       Meets the product standard's requirements.         10.2.3.2 Varification of resistance of insulating materials to normal heat and fire due to internal electric effects       Meets the product standard's requirements.         10.2.3.3 Varification 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.         10.8 Incorporation of switching devices and components       Does not apply, since the entire switchgear needs to be evaluated.         10.8 Incorporation of switching devices and components       Is the panel builder's responsibility.         10.8 Connections for external conductors	IEC/EN 61439 design verification	
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	10.12 Electromagnetic compatibility	
	10.13 Mechanical function	

# **Technical data ETIM 7.0**

Low-voltage industrial components (EG000017) / Motor operator for power circuit-breaker (EC001030)

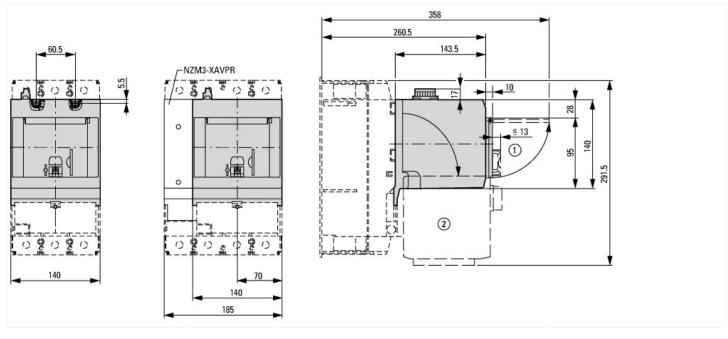
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Electrical drive for circuit breakers (ecl@ss10.0.1-27-37-04-12 [AKF010013])

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	48 - 60
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**



# Additional product information (links)

## IL01208006Z (AWA1230-2018) remote operator NZM3

IL01208006Z (AWA1230-2018) remote operator NZM3	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01208006Z2019_05.pdf
2/3-wire control and circuit diagrams	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.153