DATASHEET - NZM3-XR48-60DC



Remote operator, 48-60VDC, for size 3

Part no. NZM3-XR48-60DC Catalog No. 259856



Similar to illustration

Number of poles

Product range Accessories Acce	Delivery program				
Related operating frequency Standard Mythoproval ULICSA, IEC NZXIS Description ON and OFF switching and reserting by means of two wire or three-wire control. Local switching and reserting by means of two wire or three-wire control. Local switching and reserting by means of two wire or three-wire control. Local switching and reserting by means of two wire or three-wire control. Local switching and reserting by means of two wire or three-wire control. Local switching and reserting by means of two wire or three-wire control. Local switching and personals. Can be synchronized. Three-wire control Local switching and reserting by means of two wire or three-wire control. Frequency of the standard of the synchronized and personal desires are proported or the synchronized and personal and perso				Accessories	
Standard Maproval Description NZMA For remote switching of circuit-breakers and switch-disconnectors. ON and OFF switching and resurting by means of two wire or three write control. Local exhitching by hand possible. Lockable in the 8 position of the remote operator with up to 3 padiocks that position of the remote operator with up to 3 padiocks that positions of the remote operator with up to 3 padiocks that positions of the remote operator with up to 3 padiocks that positions of the remote operator with up to 3 padiocks that positions of the remote operator with up to 3 padiocks that positions of the remote operator with up to 3 padiocks that positions of the remote operator with up to 3 padiocks that positions in the remote operator with up to 3 padiocks that positions are remote operator with up to 3 padiocks that positions are remote operator with up to 3 padiocks that positions are remote operator with up to 3 padiocks that the AZMA Maprovine control and the remote operator with up to 3 padiocks that the AZMA Maprovine remote operator with up to 3 padiocks that the AZMA Maprovine remote operator with up to 3 padiocks that the AZMA Maprovine remote operator with up to 3 padiocks that the AZMA Maprovine remote operator with up to 3 padiocks and be asserted to 4 padions. AC 1-15 400 V 2 A D C 1-15 200 V 2 A D C 1	Accessories			Remote operator, can be synchro	nized
Construction size Por emotes awitching of circuit breakers and switch disconnectors. ON and OFF ewitching pay hand pessable. Lockable in the 8 pacision of the remote operator with up to 3 pacifocks (these trickness 4 – 8 mm) Can be synchronized Three-wire control Inter-wire control with automatic reset to the II passition after the automatic has tripped Inter-wire control with automatic reset to the II passition after the automatic has tripped Inter-wire control with automatic reset to the II passition after the automatic has tripped Inter-wire control with automatic reset to the II passition after the automatic has tripped Inter-wire control with automatic reset to the II passition after the automatic has tripped Inter-wire control with automatic reset to the II passition after the automatic has tripped Inter-wire control with automatic reset to the II passition after the automatic has tripped Inter-wire control with automatic reset to the II passition after the automatic and a light passition and a light passition after the automatic and a light passition and a light passition and a light passition and a light passiti	Rated operating frequency			DC	
Description For remote switching of circuit-breakers and switch-disconnectors. ON and OF Switching and resetting by means of two-wire or three-wire control. Local switching by hand possible. Localses in the Description of the remote operator with up to 3 padlocks thesp thickness. 4 – 8 mm) Can be synchronized Three-wire control Three-wire control Three-wire control Two-wire control Two-wire control Two-wire control Two-wire control Two-wire control Two-wire control Three-wire control Thr	Standard/Approval			UL/CSA, IEC	
ON and OFF switching and resetting by means of two-wire or three-wire control. Local switching by hand possible. Local switching by hand possible. Local switching by hand possible. Can be synchronized Three-wire control	Construction size			NZM3	
Localson in the 0 position of the remote operator with up to 3 padiocks (hasp thickness 4 – 8 mm) Can be synchronized Three-wire control Three-wire control II 1 1 2 2 2 3 2 3 2 3 2 3 2 3 2 3 3 3 2 3 2	Description			For remote switching of circuit-br	eakers and switch-disconnectors.
Lockable in the 0 position of the remote operator with up to 3 padiocks (hasp mixiness 4 – 8 mm) Can be synchronized Three-wire control 11-12 Two-wire control 12-12 Two-wire control 13-12 Three-wire control with automatic reset to the 0 position after the available of reflable distance of the control of the con				ON and OFF switching and resetti	ng by means of two-wire or three-wire control.
Three-wire control 1				Local switching by hand possible.	
Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset to the 0 position after the switch has tripped Three-wire control with automatic reset					emote operator with up to 3 padlocks (hasp
Terminal 707:				Can be synchronized	
NZM-XR Operational readiness signal when cover closed and not locked. NZM-XBD: Operational readiness signal when siding switch set to Auto. NZM-XBD: Operational readiness signal when sliding switch set to Auto. NZM-XBD: Operational readiness signal when sliding switch set to Auto. NZM-XBD: Operational readiness signal when sliding switch set to Auto. NZM-XBD: Operational readiness signal when sliding switch set to Auto. NZM-XBD: Operational readiness signal when sliding switch set to Auto. NZM-XBD: Operational readiness signal when some signal when cover closed and not locked. NZM-XBD: Operational readiness signal when sliding switch set to Auto. NZM-XBD: Operational readiness signal when sliding switch set to Auto. NZM-XBD: Operational readiness signal when sliding switch set to Auto. NZM-XBD: Operational readiness signal when signal when cover closed and not locked. NZM-XBD: Operational readiness signal when signal when cover closed and not locked. NZM-XBD: Operational readiness signal when signal when cover closed and not locked. NZM-XBD: Operational readiness signal when signal when cover closed and not locked. NZM-XBD: Operational readiness signal when signal when cover closed and not locked. NZM-XBD: Operational readiness signal when signal when cover closed and not locked. NZM-XBD: Operational readiness signal when signal when cover closed and national closed signal when cover closed signal when				11 (L1+) 0 E H1 (K1+) 17 (Z2)	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)-
Switch has tripped				L1 (L1+) S (L1	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
Switching cycle: NZM2-XR (1-1) (1-1					c reset to the O position after the
NZM2-XR O O O O O O O O O O O O O O O O O O O				(L1+) 0 = H1 × H1 × T2 T2 T3	
Break time ms 1000				$\begin{array}{c} NZM2 - XR \overbrace{\begin{smallmatrix} o_{ij} & o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{o_{ij} \circ o_{ij}} \rightarrow \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ii} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow o_{ij} \\ o_{ij} & o_{ij} \end{smallmatrix}}^{i \rightarrow o_{ij}} \underbrace{\begin{smallmatrix} i \rightarrow $	on. d ON is 3 seconds. On commands are ignored within the first 3 seconds
	Closing delay		ms	80	
Rated control voltage U _s V 48 - 60 V DC	Break time		ms	1000	
	Rated control voltage	U_s	V	48 - 60 V DC	

3/4 pole

For use with	NZM3(-4) N(S)3(-4)
Project planning information	Cannot be combined with switch-disconnector PN M22-CK11(20/02) dual auxiliary switch cannot be combined with NZM3-XR remote operator
Engineering information (sheet catalog)	2/3-wire control and circuit diagrams

Technical data

Remote operator

Rated control voltage	U_s	V	
DC	U_s	V DC	48 - 60
Operating range			
AC		$x U_s$	0.85 - 1.1
DC		$x U_s$	0.85 - 1.1
Motor rating			
DC			
24 V 30 V DC	P	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^2	
Solid or flexible conductor, with ferrule		mm^2	0,75 - 2,5
		AWG	18 14

Design verification as per IEC/EN 61439

EC/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 observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must 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)

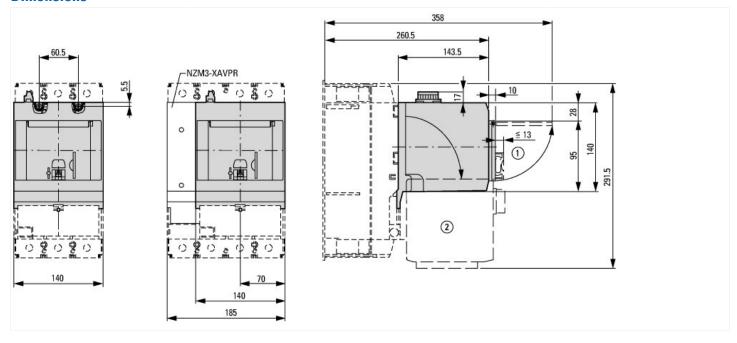
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Electrical drive for circuit breakers (ecl@ss10.0.1-27-37-04-12 [AKF010013])

Type of switch drive		Motor drive
Rated control supply voltage Us at AC 50HZ	V	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