

Delivery programme

Rated operating frequency

Standard/Approval Construction size

Product range

Accessories

Description

Part no. Article no. NZM2-XR208-240AC 259832



Accessories

AC 50/60 Hz

UL/CSA, IEC

NZM2

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)

Can be synchronized

Three-wire control

Two-wire control

(L1+) 0 IL

N (L1–, L2)



75

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

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	O ^{60 ms} OFF ON	÷	$I \rightarrow O$ on off	$\xrightarrow{t>3s}$	$0 \xrightarrow{60 \text{ ms}}_{0\text{F} \text{ON}}$
NZM3-XR	$\underset{\text{OFF ON}}{\overset{80\text{ms}}{\rightarrow}}I$	÷	$I \rightarrow O$ ON OFF	$\xrightarrow{t>3s}$	$0 \xrightarrow{80 \text{ ms}} 1$ Off ON
	105			4 - 21	100

NZM4-XR $\begin{bmatrix} \mathbf{o}_{gr}^{\text{over}} \mathbf{i} \end{bmatrix} \rightarrow \begin{bmatrix} \mathbf{i} \rightarrow \mathbf{o} \\ \mathbf{o} \mathbf{i} \end{bmatrix} \xrightarrow{r \rightarrow s} \begin{bmatrix} \mathbf{i} \rightarrow s \\ \mathbf{o} \mathbf{i} \end{bmatrix} \xrightarrow{r \rightarrow s} \begin{bmatrix} \mathbf{o}_{gr}^{\text{over}} \mathbf{i} \\ \mathbf{o} \mathbf{f} \end{bmatrix}$ 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

	~
10 III III III III III III III III III I	
0 0 0 0	
N. Contraction (Second Second	

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

AC VAC parating range AC VAC VAC AC VAC VAC AC VAC VAC DC VAC VAC AC VAC VAC DC VAC VAC AC VAC VAC AL VAC VAC AL<	Remote operator			
pering range Perind Rue Statument of the service of	Rated control voltage	Us	V	
AC U_{0} U	AC	Us	V AC	208 - 240
DC x Us 85-11 Current heat loss per pole at Lu P KW AC X X 10 V130 V AC VA 30 DC X X 24 V30 V DC VA 20 Minimum signal duration VA 30 with switch off M 30 Maximum operating frequency Operations 900 Maximum operating frequency Operations 1000 Maximum operating frequency Mm 1000 Maximum operating frequency Mm 1000	Operating range			
Current heat loss per pole at lu P KWn AC F KWn I 10 V 130 V AC VA 50 DC KUs KUs 24 V 30 V DC KUs F Atimium signal duration KWn 50 with switch off K K Atimum operating frequency F K Ataxium operating frequency F 50 Max. operating frequency Max Sprat Yerning for their berning Max Max Yerning frequency Max Max Yer	AC		x Us	0.85 - 1.1
AC Image: Section of the section of	DC		x U _s	0.85 - 1.1
10 V130 VACVA35DCKUsKUs24 V30 VDCVV50Animum signal durationVVNawith switch onns30with switch offperationsNaidespan, mechanicalPerations2000Animum operating frequencyOps/n10Animun operating frequencyNa10idespan, frequencypan/a10identified for the specified operationsNa10identified for the specified operationsNa10identified operationsNa10identified operationsma ⁿ a10identified operationsNa10identified operationsNa10 <t< td=""><td>Current heat loss per pole at I $_{\rm u}$</td><td>Р</td><td>kWh</td><td></td></t<>	Current heat loss per pole at I $_{\rm u}$	Р	kWh	
DC x Us 24 V30 V DC W Animum signal duration W with switch on ns with switch off ns idespan, mechanical Perations Axinum operating frequency Ops/n Max. operating frequency Ops/n Solid or flexible conductor, with ferrule Ops/n	AC			
24 V 30 V DC W 50 Animum signal duration W 50 with switch onf ms 30 with switch off ms 150 Aaximum operating frequency Operations V 2000 Max. operating frequency Ops/h 10 Solid or flexible conductor, with ferrule mn ² 075 - 25	110 V 130 V AC		VA	350
Animum signal duration with switch on constraint of frequency constraint of fr	DC		x U _s	
with switch ofns30with switch offns50ifespan, mechanicalOperationsV2000Aximum operating frequencyOps/hDps/h10Max. operating frequencyOps/h1010Solid or flexible conductor, with ferruleMaxMaxMaxSolid or flexible conductor, with ferruleMaxMax<	24 V 30 V DC		W	250
with switch off ns 150 ifespan, mechanical Operations 2000 Maximum operating frequency Ops/h 120 Max. operating frequency Ops/h 120 Solid or flexible conductor, with ferrule ma ² N5 - 25	Minimum signal duration			
ifespan, mechanicalOperationsImage: span big	with switch on		ms	30
Maximum operating frequency Ops/h Max. operating frequency Ops/h Perminal capacities Pm ² Solid or flexible conductor, with ferrule mm ²	with switch off		ms	150
Max. operating frequency Ops/h 120 reminal capacities mm ²	Lifespan, mechanical	Operations		20000
reminal capacities mm ² Solid or flexible conductor, with ferrule mm ² 0,75 - 2,5	Maximum operating frequency		Ops./h	
Solid or flexible conductor, with ferrule mm ² 0,75 - 2,5	Max. operating frequency		Ops/h	120
	Terminal capacities		mm ²	
AWG 18 14	Solid or flexible conductor, with ferrule		mm ²	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 6.0

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

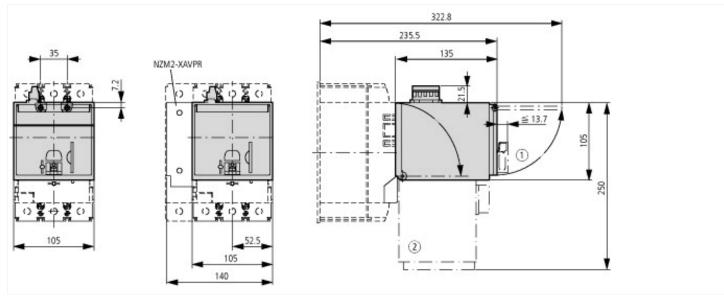
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Electrical drive for circuit breakers (ecl@ss8.1-27-37-04-12 [AKF010010])

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 op	erator
IL01206002Z (AWA1230-1984) NZM2 remote operator	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL01206002Z2015_02.pdf
2/3-wire control and circuit diagrams	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.153