



Remote operator, 48-60VDC, for size 3

Part no. **NZM3-XR48-60DC**  
 Article no. **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			<p>For remote switching of circuit-breakers and switch-disconnectors.</p> <p>ON and OFF switching and resetting by means of two-wire or three-wire control.</p> <p>Local switching by hand possible.</p> <p>Lockable in the 0 position of the remote operator with up to 3 padlocks (hasp thickness: 4 – 8 mm)</p> <p><b>Can be synchronized</b></p> <p><b>Three-wire control</b></p> <p><b>Two-wire control</b></p> <p><b>Three-wire control with automatic reset to the 0 position after the switch has tripped</b></p> <p><b>Switching cycle:</b></p> <p>NZM2-XR: OFF → ON → OFF → ON (t &gt; 3s)</p> <p>NZM3-XR: OFF → ON → OFF → ON (t &gt; 3s)</p> <p>NZM4-XR: OFF → ON → OFF → ON (t &gt; 3s)</p> <p>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.</p> <p><b>Parallel remote operator connection</b></p>
Closing delay		ms	80
Break time		ms	1000
Rated control voltage	U <sub>s</sub>	V	48 - 60 V DC

Number of poles		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 <sub>s</sub>	V	
DC	U <sub>s</sub>	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	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 <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 6.0

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

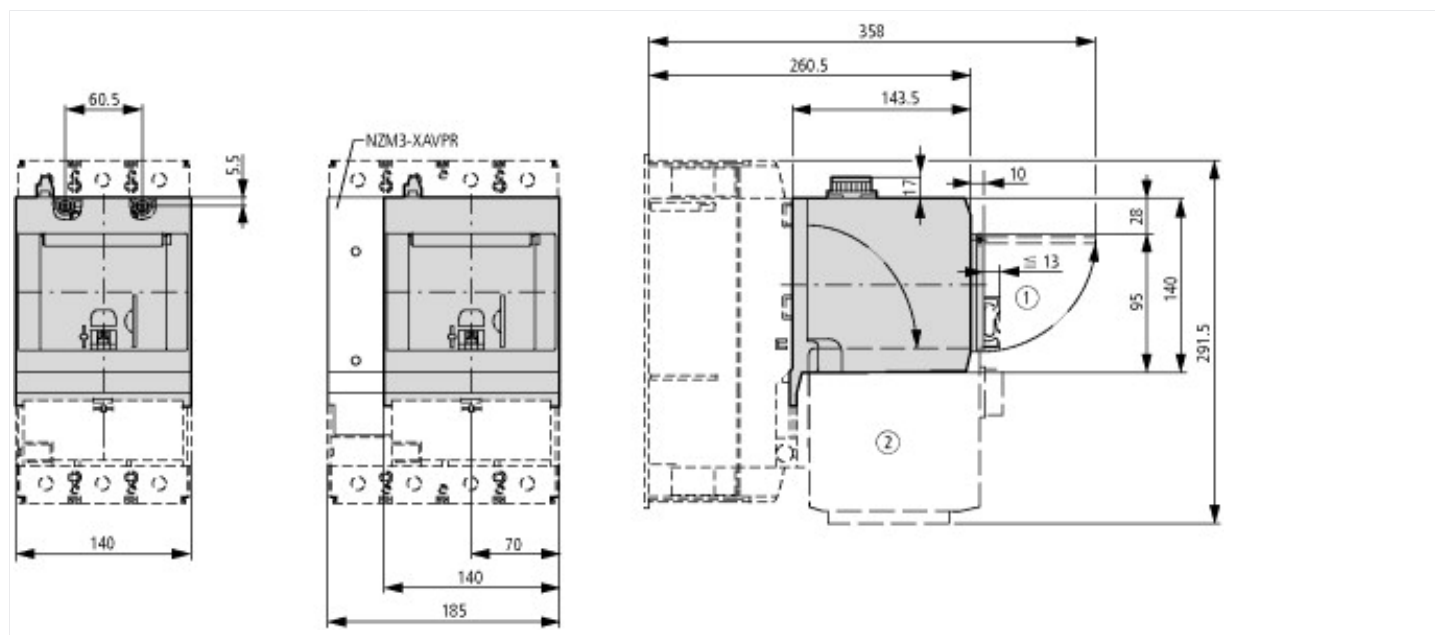
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Electrical drive for circuit breakers (ec1@ss8.1-27-37-04-12 [AKF010010])

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)

2/3-wire control and circuit diagrams

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