

Remote operator, 48-60VDC, for size 2

**Part no.**                    **NZM2-XR48-60DC**  
**259838**

<b>General specifications</b>		
Product name		Eaton Moeller series NZM remote operator
Part no.		NZM2-XR48-60DC
EAN		4015082598389
Product Length/Depth		150 millimetre
Product height		105 millimetre
Product width		105 millimetre
Product weight		1.728 kilogram
Compliances		UL/CSA IEC RoHS conform
Certifications		CSA (File No. 22086) CSA certified UL listed UL489 CSA-C22.2 No. 5-09 CE marking UL (File No. E140305) IEC60947 CSA (Class No. 1437-01) UL (Category Control Number DIHS)
Product Tradename		NZM
Product Type		Accessories
Product Sub Type		Remote operator
<b>Delivery program</b>		
Type		Accessory Remote operator, can be synchronized
Number of poles		Three-pole/Four-pole
Special features		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
Frame		NZM2
Used with		NZM2(-4) N(S)2(-4)
<b>Technical Data - Electrical</b>		
Voltage type		AC
Voltage rating		48 - 60 V DC
Operating voltage - min		0.85 x Us
Operating voltage - max		1.1 x Us
Rated control supply voltage (Us) at AC, 50 Hz - min		0 V
Rated control supply voltage (Us) at AC, 50 Hz - max		0 V
Rated control supply voltage (Us) at AC, 60 Hz - min		0 V
Rated control supply voltage (Us) at AC, 60 Hz - max		0 V
Rated control supply voltage (Us) at DC - min		48 V
Rated control supply voltage (Us) at DC - max		60 V
Voltage tolerance - min		0.85
Voltage tolerance - max		1.1
Power consumption		250 W (24 - 30 V DC)
Closing delay		60 ms
Breaking time		300 ms
Number of operations per hour - max		120
Signal duration of remote operator at switch off - min		150 ms
Signal duration of remote operator at switch on - min		30 ms
<b>Technical Data - Mechanical</b>		
Switch drive type		Motor drive

Special features		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
Lifespan, mechanical		20000 operations
<b>Technical Data - Mechanical - Terminals</b>		
Terminal capacity (solid/flexible conductor)		0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> with ferrule 18 - 14 AWG
<b>Design verification as per IEC/EN 61439</b>		
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 9.0

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@ss13-27-37-04-12 [AKF010018])		
Type of switch drive		Motor drive
Rated control supply voltage AC 50 Hz	V	0 - 0
Rated control supply voltage AC 60 Hz	V	0 - 0
Rated control supply voltage DC	V	48 - 60
Voltage type for actuating		AC