



Shunt release, 12VAC/DC, +1early N/O

Part no. **NZM1-XAHIV12AC/DC**  
**259772**

General specifications	
Product name	Eaton Moeller series NZM release
Part no.	NZM1-XAHIV12AC/DC
EAN	4015082597726
Product Length/Depth	37 millimetre
Product height	66 millimetre
Product width	32 millimetre
Product weight	0.044 kilogram
Compliances	UL/CSA IEC RoHS conform
Certifications	CSA-C22.2 No. 5-09 CSA certified UL (Category Control Number DIHS) UL (File No. E140305) CSA (File No. 22086) UL489 UL listed CE marking CSA (Class No. 1437-01) IEC60947
Product Tradename	NZM
Product Type	Accessories
Product Sub Type	Release
Delivery program	
Type	Accessory Shunt release
Special features	Cannot be used in conjunction with NZM...-XR... remote operator. If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on. Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms. Shunt releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.
Frame	NZM1
Fitted with:	Early-make auxiliary contact
Suitable for	Off-load switch
Used with	NZM1(-4), N(S)1(-4)
Technical Data - Electrical	
Voltage type	AC
Voltage rating	0.7 - 1.1 x Us
Voltage rating at AC (x Us) - min	0.7
Voltage rating at AC (x Us) - max	1.1
Rated control voltage (relay contacts)	12 V AC 12 V DC
Rated control supply voltage	12 V AC/DC
Rated control supply voltage (Us) at AC, 50 Hz - min	12 V
Rated control supply voltage (Us) at AC, 50 Hz - max	12 V
Rated control supply voltage (Us) at AC, 60 Hz - min	12 V
Rated control supply voltage (Us) at AC, 60 Hz - max	12 V
Rated control supply voltage (Us) at DC - min	12 V
Rated control supply voltage (Us) at DC - max	12 V
Frequency rating	50 Hz / 60 Hz / 200 Hz / 400 Hz, DC (shunt release)
Pick-up power consumption (shunt release)	2.5 VA/W
Reaction time	20 ms
Time on duty - max	∞

Minimum command time - min		10 ms
Minimum command time - max		15 ms
Electric connection type		Screw connection
<b>Technical Data - Mechanical</b>		
Number of contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		0
Number of contacts (normally open contacts)		1
Connection type		With terminal block on the left-hand switch side With 3 m connection cable instead of screw termination
Special features		Cannot be used in conjunction with NZM...-XR... remote operator. If the shunt trip is live, contact with the circuit breaker's primary contacts is prevented when switched on. Early make of auxiliary contact on switching on and off (manual operation): approx. 20 ms. Shunt releases cannot be installed simultaneously with NZM...-XHIV... early-make auxiliary contact or NZM...-XU... undervoltage release.
<b>Technical Data - Mechanical - Terminals</b>		
Terminal capacity (solid/flexible conductor)		0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> (1x) at shunt release with ferrule 18 - 14 AWG (2x) for undervoltage releases, off-delayed 18 - 14 AWG (1x) at shunt release 0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> (2x) at shunt release with ferrule 0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> (2x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (2x) at shunt release 0.75 mm <sup>2</sup> - 2.5 mm <sup>2</sup> (1x) for undervoltage releases, off-delayed with ferrule 18 - 14 AWG (1x) for undervoltage releases, off-delayed
<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) / Shunt release (for power circuit breaker) (EC001023)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Full load current trip (ecl@ss13-27-37-04-18 [AKF016018])		
Rated control supply voltage AC 50 Hz	V	12 - 12
Rated control supply voltage AC 60 Hz	V	12 - 12
Rated control supply voltage DC	V	12 - 12
Voltage type for actuating		AC
Initial value of the undelayed short-circuit release - setting range	A	0
End value adjustment range undelayed short-circuit release	A	0
Power consumption	W	

Type of electric connection			Screw connection
Number of contacts as normally open contact			1
Number of contacts as normally closed contact			0
Number of contacts as change-over contact			0
Suitable for power circuit breaker			No
Suitable for off-load switch			Yes
Suitable for motor safety switch			No
Suitable for overload relay			No