## **DATASHEET - NZM2-4-XFIA**

Earth-fault release, 0.3-1A AC/DC sensitive, 4p



NZM2-4-XFIA 292346



General specifications		
Product name	Eaton Moeller series NZM release	
Part no. EAN	NZM2-4-XFIA 4015082923464	
Product Length/Depth	132 millimetre	
Product height	103 millimetre	
Product width	140 millimetre	
Product weight	2.03 kilogram	
Compliances	IEC RoHS conform	
Certifications	IEC/EN 60947-2 annex B IEC/EN 60947-2	
Product Tradename	NZM	
Product Type	Accessories	
Product Sub Type	Release	
Delivery program		
Application	In three- and single-phase systems	
Туре	Accessory Earth-fault releases	
Number of poles	Four-pole	
Features	Sealable, setting buttons	
Special features	Core-balance principle with AC/DC sensitivity (in range 0 - 100 kHz) For 4 NZM2-4 circuit-breakers and N2-4 switch-disconnectors Internal power = 50 - 400 V	
Frame	96 mm NZM2	
Used with	NZM2-4 N2-4 Four-pole	
Technical Data - Electrical		
Sensitivity type	Sensitive to AC/DC (type B)	
Voltage rating	50 - 400 V AC (independent of mains voltage)	
Voltage rating at DC	50 V DC (dependent on mains voltage)	
Rated operating voltage (Ue) - max	400 V	
Rated control supply voltage (Us) at AC, 50 Hz - min	50 V	
Rated control supply voltage (Us) at AC, 50 Hz - max	400 V	
Rated control supply voltage (Us) at AC, 60 Hz - min	50 V	
Rated control supply voltage (Us) at AC, 60 Hz - max	400 V	
Rated control supply voltage (Us) at DC - min	0 V	
Rated control supply voltage (Us) at DC - max	0 V	
Current rating - min	15 A	
Current rating - max	250 A	
Rated fault current - min	0.3 A	
Rated fault current - max	1 A	
Fault current detection range	With AC voltage: 0 - 100 kHz With pulsed DC voltage: 50 Hz	
Frequency rating	50 Hz	
Power on-delay time - min	100 ms	
Power on-delay time - max	100 ms	
Technical Data - Mechanical		
Mounting Method	Bottom	
Mounting position	Vertical and 90° in all directions	

Degree of protection	IP20 (operating component area)
Shock resistance	20 g (half-sinusoidal shock 20 ms)
Special features	Core-balance principle with AC/DC sensitivity (in range 0 - 100 kHz) For 4 pole NZM2-4 circuit-breakers and N2-4 switch-disconnectors Internal power supply U = 50 - 400 V
Lifespan, mechanical	≥ 2000 operations
Technical Data - Mechanical - Terminals	
Terminal capacity (solid/flexible conductor)	As NZM2 standard connection with ferrules As NZM2 standard terminal without ferrules
Design verification as per IEC/EN 61439 - technical data	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	70 °C
Design verification as per IEC/EN 61439	
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 b observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must b observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
Additional information	
Functions	Delay adjustable

## **Technical data ETIM 9.0**

Low-voltage industrial components (EG000017) / Residual current release for power circuit breaker (EC001021)					
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Fault current switch for circuit breakers (ecl@ss13-27-37-04-11 [AKF009018])					
Rated control supply voltage AC 50 Hz		V	50 - 400		
Rated control supply voltage AC 60 Hz		V	50 - 400		
Rated control supply voltage DC		V	0 - 0		
Rated fault current		А	0.3 - 1		
Max. power on-delay time		ms	100		
Delay adjustable			Yes		
Max. rated operation voltage Ue		V	400		