

DATASHEET - NZM2-4-XFIA



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

**Part no. NZM2-4-XFIA
292346**

General specifications	
Product name	Eaton Moeller series NZM release
Part no.	NZM2-4-XFIA
EAN	4015082923464
Product Length/Depth	132 millimetre
Product height	103 millimetre
Product width	140 millimetre
Product weight	2.03 kilogram
Compliances	RoHS conform IEC
Certifications	IEC/EN 60947-2 IEC/EN 60947-2 annex B
Product Tradename	NZM
Product Type	Accessories
Product Sub Type	Release
Delivery program	
Application	In three- and single-phase systems
Type	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 pole NZM2-4 circuit-breakers and N2-4 switch-disconnectors Internal power supply Us = 50 - 400 V
Frame	NZM2 96 mm
Used with	Four-pole N2-4 NZM2-4
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 pulsed DC voltage: 50 Hz With AC voltage: 0 - 100 kHz
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 Us = 50 - 400 V
Lifespan, mechanical		≥ 2000 operations
Technical Data - Mechanical - Terminals		
Terminal capacity (solid/flexible conductor)		As NZM2 standard terminal without ferrules As NZM2 standard connection with 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 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.
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	A		0.3 - 1
Max. power on-delay time	ms		100
Delay adjustable			Yes
Max. rated operation voltage Ue	V		400