DATASHEET - NZM1-4-XFI300R

Earth-fault release, 300mA, 4p, right

Part no. **NZM1-4-XFI300R**
104607

Powering Business Worldwide™

General specifications

Product name	Eaton Moeller series NZM - Molded Case Circuit Breaker
Part no.	NZM1-4-XFI300R
EAN	4015081044177
Product Length/Depth	220 millimetre
Product height	80 millimetre
Product width	135 millimetre
Product weight	1.6 kilogram
Compliances	IEC RoHS conform
Certifications	IEC/EN 60947-2 IEC/EN 60947-2 annex B
Product Tradename	NZM
Product Type	Molded Case Circuit Breaker
Product Sub Type	None

Delivery program

Application	In three-phase systems
Type	Accessory Earth-fault releases
Number of poles	Four-pole
Special features	Earth-fault release to IEC/EN 60947-2 Not UL/CSA approved Suitable for use in three-phase systems Pulse-current sensitive type A according to core-balance principle For 4 pole NZM1-4 circuit-breakers and N1-4 switch-disconnectors Supply voltage-dependent Ue = 200 – 415 V 50/60 Hz Control knobs, sealable. Fitted on the right side up to In = 160 A at ICu = 50 kA
Frame	45 mm NZM1
Used with	NZM1-4 Four-pole N1-4

Technical Data - Electrical

Sensitivity type	Pulse-current sensitive as per core-balance principle (type A)
Voltage rating	200 - 415 V AC, min. 80 V AC for detection of fault currents type A/AC (dependent on mains voltage)
Rated operating voltage (Ue) - max	415 V
Rated control supply voltage (Us) at AC, 50 Hz - min	200 V
Rated control supply voltage (Us) at AC, 50 Hz - max	415 V
Rated control supply voltage (Us) at AC, 60 Hz - min	200 V
Rated control supply voltage (Us) at AC, 60 Hz - max	415 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	160 A
Rated fault current - min	0.3 A
Rated fault current - max	0.3 A
Fault current detection range	50/60 Hz
Frequency rating	50 Hz / 60 Hz
Power on-delay time - min	300 ms
Power on-delay time - max	300 ms

Technical Data - Mechanical

Mounting Method	On the right side
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			Earth-fault release to IEC/EN 60947-2 Not UL/CSA approved Suitable for use in three-phase systems Pulse-current sensitive type A according to core-balance principle For 4 pole NZM1-4 circuit-breakers and N1-4 switch-disconnectors Supply voltage-dependent Ue = 200 – 415 V 50/60 Hz Control knobs, sealable. Fitted on the right side up to In = 160 A at ICu = 50 kA
Lifespan, mechanical			20000 operations
Technical Data - Mechanical - Terminals			
Terminal capacity (solid/flexible conductor)			As NZM1 standard terminal with ferrules As NZM1 standard terminal without ferrules
Design verification as per IEC/EN 61439 - technical data			
Ambient operating temperature - min			-5 °C
Ambient operating temperature - max			40 °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.

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	200 - 415
Rated control supply voltage AC 60 Hz		V	200 - 415
Rated control supply voltage DC		V	0 - 0
Rated fault current		A	0.3 - 0.3
Max. power on-delay time		ms	300
Delay adjustable			No
Max. rated operation voltage Ue		V	415