

## Earth-fault release, 30mA, 4p

Part no. **NZM2-4-XFI30**  
 Catalog No. **292343**

## Delivery program

Description			Earth-fault release to IEC/EN 60947-2 not UL/CSA approved Suitable for use in three- and single-phase systems Pulse-current sensitive according to core-balance principle For 4 pole NZM2-4 circuit-breakers and N2-4 switch-disconnectors Supply voltage-dependent $U_e = 280 - 690 \text{ V } 50 \text{ Hz}$
<b>For use with</b>			
For use with			NZM2-4 N2-4
Pole			4 pole
<b>Notes</b>			
Auxiliary contacts (1 N/O, 1 N/C integrated) are reset via the reset button.			
Not in combination with plug-in units, insulated enclosure or main switch assembly kit for side panel mounting with mounting bracket.			
Rated ultimate short-circuit breaking capacity is determined by the fitted NZM2.			
If a switch-disconnector N2 is applied by the back-up fuse to be used → Technical data.			

## Technical data

## Electrical

Standards			IEC/EN 60947-2 IEC/EN 60947-2 annex B
Sensitivity			Pulse-current sensitive as per core-balance principle (type A)
Min. operating voltage	$U_e$	V	
or detection of fault currents type A/AC			independent of mains voltage
Suitability for the application			In three- and single-phase systems
Rated operational voltage	$U_e$	V AC	280...690
Rated frequency	f	Hz	50
Number of poles			4-pole
Rated current range	$I_n$	A	15...250
Rated fault currents	$I_{\Delta n}$	A	0.03
Detection range of the fault current			50 Hz
Rated ultimate short-circuit making capacity and rated ultimate short-circuit breaking capacity	$I_{\Delta m}$	A	= $I_{CU}$
Mechanical shock resistance (IEC 60068-2-27)			20 (half-sinusoidal shock 20 ms)
Lifespan, mechanical (50 % with fault current)	Operations		≥ 2 000

## Mechanical

Standard front dimension		mm	96
Mounting			Bottom
Mounting position			Vertical and 90° in all directions
Supply			
			As required
Degree of protection			IP20 in the operating component area
Ambient temperature			-25 - +70
Terminal capacity			
Flexible without ferrule		mm <sup>2</sup>	wie NZM2 Standardanschluss
flexible with ferrules		mm <sup>2</sup>	With NZM2 standard connection

## Design verification as per IEC/EN 61439

Technical data for design verification			
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70

IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties			
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 8.0

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@ss10.0.1-27-37-04-11 [AKF009013])			
Rated control supply voltage Us at AC 50HZ	V		280 - 690
Rated control supply voltage Us at AC 60HZ	V		0 - 0
Rated control supply voltage Us at DC	V		0 - 0
Rated fault current	A		0.03 - 0.03
Max. power on-delay time	ms		30
Delay adjustable			No
Max. rated operation voltage Ue	V		690