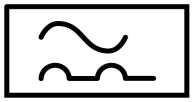


Earth-fault release, 300mA, 3p, bottom

Part no. NZM1-XFI300U
Article no. 104610
Catalog No. NZM1-XFI300U

Similar to illustration

Delivery programme

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 3 pole NZM1 circuit-breakers and N1 switch-disconnectors Supply voltage-dependent Ue = 200 – 415 V 50/60 Hz
Contact sequence			

For use with

For use with			NZM1 N(S)1
Pole			3 pole

Notes

With $I_{\Delta n}$ = 0.03 A: delay time t_v always fixed setting at 10 ms.

Alarm message > 30 % $I_{\Delta n}$ by yellow LED.

Trip indication max. 2 auxiliary contacts (HIAFI) can be fitted by user: N/O = M22-K01, N/C = M22-K10 are reset via the reset toggle lever.

If the trip-indicating auxiliary contact in the fault current block is used, the N/C contacts operates as a N/O contact and the N/C contact operates as an N/O contact.

Double contact not permissible.

Not in combination with insulated enclosure or main switch assembly kit for side panel mounting with mounting bracket

NZM1-XFI...R can not be used in combination with lower cover NZM1-XUSA.

NZM1-XFI…U not in combination with shunt or undervoltage release, early-make auxiliary contacts.

Rated ultimate short-circuit breaking capacity is determined by the fitted NZM1, NS1.

If a switch-disconnector N1 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			80 V (dependent on mains voltage)
Suitability for the application			in three-phase systems
Rated operational voltage	U_e	V AC	200…415 (3~)
Rated frequency	f	Hz	50/60
Number of poles			4-pole
Rated current range	I_n	A	15…100
Rated fault currents	$I_{\Delta n}$	A	0.3
Detection range of the fault current			50/60 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		20000

Mechanical

Standard front dimension		mm	45
Mounting			Bottom
Mounting position			Vertical and 90° in all directions

Supply		
		NZM1 from above
Degree of protection		IP20 in the operating component area
Ambient temperature		-5 - +40
Terminal capacity		
Flexible without ferrule	mm^2	wie NZM1 Standardklemme
flexible with ferrules	mm^2	such as NZM1 standard terminal

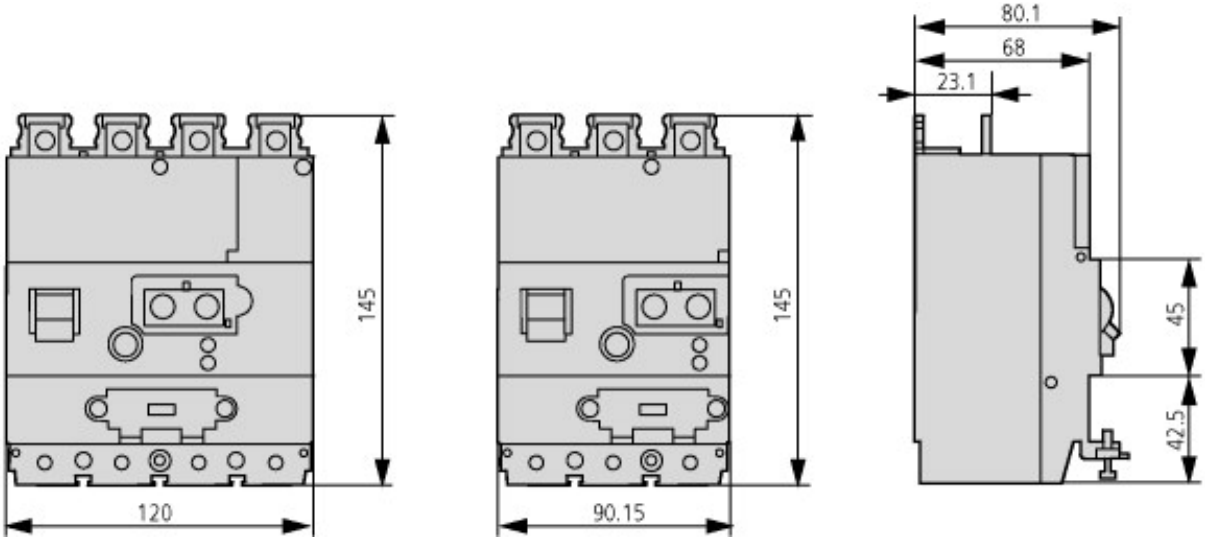
Design verification as per IEC/EN 61439

Technical data for design verification		
Operating ambient temperature min.	°C	-5
Operating ambient temperature max.	°C	40
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 6.0

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@ss8.1-27-37-04-11 [AKF009010])		
Rated control supply voltage Us at AC 50HZ	V	200 - 415
Rated control supply voltage Us at AC 60HZ	V	200 - 415
Rated control supply voltage Us at 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

Dimensions



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