# In 133 Era

## Standard auxiliary contact, 2N/O+1N/C, screw connection

Powering Business Worldwide\*

Part no. NHI21-PKZ0
Catalog No. 072894
Eaton Catalog No. XTPAXSA21

## **Delivery program**

Product range	Accessories
Accessories	Standard auxiliary contact
For use with	PKZ0(4) standard auxiliary contacts
Contacts	
N/O = Normally open	2 N/O
N/C = Normally closed	1 NC
Contact diagram	NHI21
Contact sequence	133 121 133
Connection technique	Screw terminals
For use with	PKZM01 PKZM0 PKZM4 PKZM0-T PKM0 PKE

#### Notes

Can be fitted to the right of motor-protective circuit-breakers, transformer-protective circuit-breakers, motor-protective circuit-breakers for starter combinations.

Can be combined with:

AGM, NHI-E-... trip-indicating auxiliary contact

## **Technical data**

#### **Auxiliary contacts**

$U_{\text{imp}}$	V AC	6000
		III/3
U <sub>e</sub>	V	
U <sub>e</sub>	V AC	500
U <sub>e</sub>	V DC	250
	V AC	690
I <sub>e</sub>	Α	
I <sub>e</sub>	Α	3.5
I <sub>e</sub>	Α	2
I <sub>e</sub>	Α	1
I <sub>e</sub>	Α	2
I <sub>e</sub>	Α	1
	Ue Ue Ue Ue le le	Ue V Ue V AC Ue V DC  V AC Ie A Ie A Ie A

110 V	l <sub>e</sub>	Α	0.5
220 V	l <sub>e</sub>	Α	0.25
Lifespan		S	
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	> 0.1
Lifespan, electrical	Operations	x 10 <sup>6</sup>	0.05
Control circuit reliability	Failure rate	λ	$<10^{-8}$ , $<$ one failure at 100 million operations (at U <sub>e</sub> = 24 V DC, U <sub>min</sub> = 17 V, I <sub>min</sub> = 5.4 mA)
interlocked opposing contacts			yes
Short-circuit rating without welding			
Fuseless		Туре	FAZ-B4/1-HI
Fuse		A gG/gL	10
Terminal capacities			
Solid or flexible conductor, with ferrule		mm <sup>2</sup>	0,75 - 2,5

Solid or flexible conductor, with ferrule	$mm^2$	0,75 - 2,5
Solid or stranded	AWG	18 - 14

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	3.5
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0.04
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
EC/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**

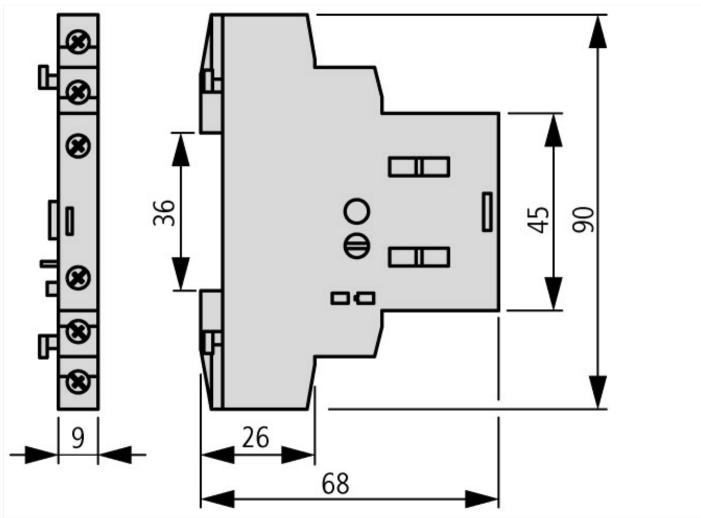
Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)

Electric engineering, automation, process control engineering / Low-voltage switch (ecl@ss8.1-27-37-13-02 [AKN342010])	h technology / (	Componen	t for low-voltage switching technology / Auxiliary switch block
Number of contacts as change-over contact			0
Number of contacts as normally open contact			2
Number of contacts as normally closed contact			1
Rated operation current le at AC-15, 230 V		Α	3.5
Type of electric connection			Screw connection
Model			Top mounting
Mounting method			Side mounting

## Approvals

Product Standards	UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking
UL File No.	E36332
UL Category Control No.	NLRV
CSA File No.	165628
CSA Class No.	3211-05
North America Certification	UL listed, CSA certified
Specially designed for North America	No

# **Dimensions**



# **Additional product information (links)**

IL03402034Z (AWA1210-1945) Motor-protective circuit-breaker, Starter		
IL03402034Z (AWA1210-1945) Motor-protective circuit-breaker, Starter	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402034Z2016_06.pdf	
IL03407011Z (AWA1210-1925) Motor-protective	circuit-breaker	
IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407011Z2014_02.pdf	
IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407011Z2017_07.pdf	

Motor starters and "Special Purpose Ratings" http://www.moeller.net/binary/ver\_techpapers/ver953en.pdf for the North American market

Busbar Component Adapters for modern Industrial control panels

http://www.moeller.net/binary/ver\_techpapers/ver960en.pdf