DATASHEET - NHI21-PKZ0

Part no.

(Norway)

No.



Standard auxiliary contact, 2N/0+1N/C, screw connection

NHI21-PKZ0 Catalog No. 072894 Alternate Catalog XTPAXSA21 **EL-Nummer** 4355132



Delivery program

Product range	Accessories
Accessories	Standard auxiliary contact
	Can be retrofitted on the right side of motor-protective circuit-breakers
Contacts	
N/O = Normally open	2 N/O
N/C = Normally closed	1 NC
Contact diagram	
Contact sequence	
Connection technique	Screw terminals
For use with	PKZ0(4) standard auxiliary contacts
For use with	PKZM01 PKZM0 PKZM4 PKZM0-T PKM0 PKE
Notes Can be fitted to the right of: Motor protective circuit-breaker Transformer-protective circuit-breaker Motor protective circuit breaker for starter combinations Cannot be used for motor starter combinations type MSC-R can be combined with AGM, NHI-E	

Technical data Auxilians contects

Auxiliary contacts			
Rated impulse withstand voltage	U _{imp}	V AC	6000
Overvoltage category/pollution degree			III/3
Rated operational voltage	U _e	V	
	U _e	V AC	500
	U _e	V DC	250
Safe isolation to EN 61140			
Between auxiliary contacts and main contacts		V AC	690
Rated operational current	Ι _e	Α	
AC-15			
220 - 240 V	۱ _e	А	3.5
380 - 415 V	۱ _e	А	2
440 V 500 V	le	А	1
DC-13 L/R - 100 ms			
24 V	le	А	2

BVInInInIn10VInAS20VInAS20VInSSLifesonOremoRSLifeson, mechanicalOremoRSControlicitari eliabilityOremoRSStarterSSSStarterS<				
20V A A Lifespan, mechanical Oreration S Lifespan, mechanical Operation x.10 ^a Lifespan, electrical Operation x.10 ^a Control circuit reliability Failure at X.10 ^a Interlocked opposing contexts Failure at X.10 ^a Fuseless Image: Source at the second at t	60 V	l _e	A	1
Lifespan, mechanical Operation x.10 ^a 0.1 Lifespan, mechanical Operation x.10 ^a 0.1 Lifespan, electrical Operation x.10 ^a 0.5 Control circuit reliability Failure att x.10 ^a 0.5 Control circuit reliability Failure att x.10 ^a x.10 ^a Stort-circuit rating without welding Failure att x.10 ^a x.10 ^a Fuseless Type AZ-B4/1-HI X.10 ^a Stort-circuit rating without welding Failure att x.10 ^a X.20 ^b X.20 ^b Fuseless Type AZ-B4/1-HI X.20 ^b X.20 ^b Stort of fexible conductor, with ferrule Failure att X.20 ^b X.20 ^b X.20 ^b Stort of fexible conductor, with ferrule Failure att X.20 ^b X.20 ^b X.20 ^b Stort of expreved types Failure att X.20 ^b X.20 ^b X.20 ^b Stort of expreved types Failure att X.20 ^b X.20 ^b X.20 ^b Stort of expreved types Failure att X.20 ^b X.20 ^b X.20 ^b Goord	110 V	l _e	А	0.5
Instancial Operation r,100	220 V	l _e	А	0.25
Lifespan, electrical Operations r_10^6	Lifespan		S	
Control circuit reliability Failure rate Arror Control circuit reliability fuelocated opposing contacts Failure rate Arror (at U _q = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) interlocked opposing contacts Failure rate (at U _q = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) Short-circuit rating without welding Failure rate Failure rate (at U _q = 24 V DC, U _{min} = 17 V, I _{min} = 5.4 mA) Fuseless Failure rate Failure rate Failure rate Failure rate Fuse Failure rate Failure rate Failure rate Failure rate Terminal capacities Failure rate Mrm ² Mrm ² Mrm ² Solid or flexible conductor, with ferrule Mrm ² Mrm ² Mrm ² Mrm ² Solid or stranded Mrm ² Mrm ² Mrm ² Mrm ² Mrm ² Solid or stranded Mrm ² Mrm ² Mrm ² Mrm ² Mrm ² Ac Coperated Mrm ² Mrm ² Mrm ² Mrm ² Mrm ² Mrm ² General Use Mrm ² Mrm ² Mrm ² Mrm ² <	Lifespan, mechanical	Operations	x 10 ⁶	> 0.1
interlocked opposing contacts Impact Set Wind S	Lifespan, electrical	Operations	x 10 ⁶	0.05
Short-circuit rating without welding Image Image Kaz-B4/1-HI Fuse Xay Xay </td <td>Control circuit reliability</td> <td>Failure rate</td> <td>λ</td> <td></td>	Control circuit reliability	Failure rate	λ	
Fuseless Fuseless Fuseless Faz-B4/1-Hi Fuse A G(r) A G(r) I Terminal capacities Terminal capacities Terminal capacities Solid or flexible conductor, with ferrule Image: Marce of	interlocked opposing contacts			yes
Fuse A gG/L A gG/L Fuse A gG/L 0 Terminal capacities mm² 075 ².5 Solid or flexible conductor, with ferrule AWG 18 14 Solid or stranded AWG 18 14 Rating data for approved types 4600 Plot Duty AC operated A600 General Use 4600 AC AC 00 AC AC 00 AC AC AC	Short-circuit rating without welding			
Terminal capacities Solid or flexible conductor, with ferrule Imm ² 075 - 2,5 Solid or stranded AWG 18 - 14 Rating data for approved types Imm ² AC operated Pilot Duty Imm ² A600 Goneral Use Imm ² AC AC Imm ² Imm ² AC Imm ² Imm ² <	Fuseless		Туре	FAZ-B4/1-HI
Solid or flexible conductor, with ferruleImm20,75 2,5Solid or strandedAWG8 - 14Rating data for approved typesPlot DutyImm2AC operatedP operatedImm2AGOD operatedImm2AGOGeneral UseImm2Imm2ACImm2Imm2<			A gG/gL	10
Solid or stranded AWG 8 - 14 Rating data for approved types E Pliot Duty AC operated AC DC operated AC AC AC AC AC	Terminal capacities			
Pilot Duty Image: Comparison of the second seco	Solid or flexible conductor, with ferrule		mm ²	0,75 - 2,5
Pilot DutyPilot DutyPilot DutyPilot DutyAC operatedPilot PilotA600DC operated0300ACPilot PilotACPilot PilotACPilot PilotACPilot PilotDCV50			AWG	18 - 14
AC operatedA600DC operated300General UseMACMACMACMDCVSolutionMDCV	Rating data for approved types			
DC operated Model General Use Model AC Model AC AC DC Model DC V State State	Pilot Duty			
General UseImage: Constraint of the second seco	AC operated			A600
ACV600ACA5DCV250	DC operated			Ω300
AC A 5 DC V 250	General Use			
DC V 250	AC		V	600
	AC		А	5
DC A 1	DC		V	250
	DC		А	1

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	А	3.5
Heat dissipation per pole, current-dependent	P _{vid}	W	0.04
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
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.

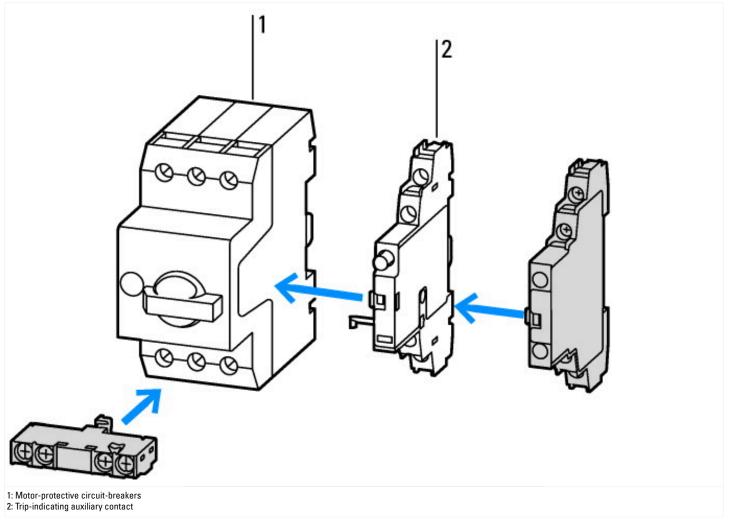
Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041))		
Electric engineering, automation, process control engineering / Low-voltage switc (ecl@ss10.0.1-27-37-13-02 [AKN342013])	h technology / Com	nponent	for low-voltage switching technology / Auxiliary switch block
Number of contacts as change-over contact		I	0
Number of contacts as normally open contact		:	2
Number of contacts as normally closed contact			1
Number of fault-signal switches		(0
Rated operation current le at AC-15, 230 V	A	:	3.5
Type of electric connection		:	Screw connection
Model			Top mounting
Mounting method		:	Side mounting
Lamp holder		l	None

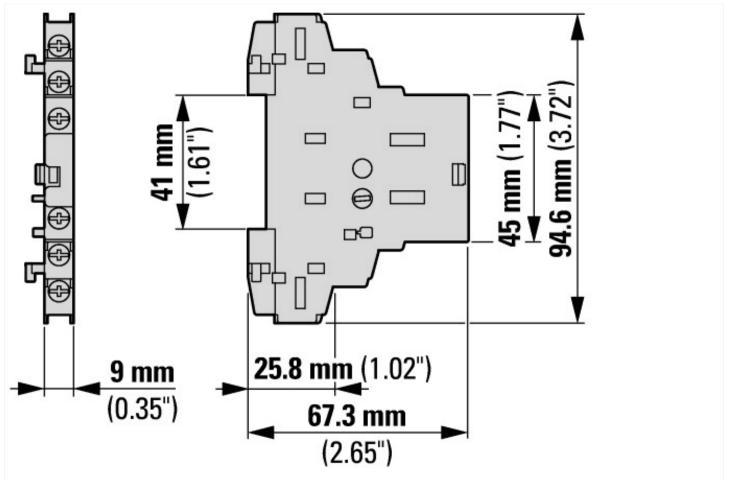
Approvals	
Product Standards	

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)

Motor starters and "Special Purpose Ratings" for the North American market

Busbar Component Adapters for modern Industrial control panels

http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf

http://www.moeller.net/binary/ver_techpapers/ver960en.pdf