DATASHEET - NHI21-PKZ0



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

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

No.

EL-Nummer 4355132

(Norway)



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 | NHI21 |
| Contact sequence | 133 121 133 |
| Connection technique | Screw terminals |
| For use with | PKZ0(4) standard auxiliary contacts |
| For use with | PKZM01 PKZM0 PKZM4 PKZM0-T PKM0 PKE |

Technical data

Motor protective circuit-breaker Transformer-protective circuit-breaker

can be combined with AGM, NHI-E ...

Motor protective circuit breaker for starter combinations Cannot be used for motor starter combinations type MSC-R...

Auxiliary contacts

| 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 | le | Α | |
| AC-15 | | | |
| 220 - 240 V | l _e | Α | 3.5 |
| 380 - 415 V | l _e | Α | 2 |
| 440 V 500 V | l _e | Α | 1 |
| DC-13 L/R - 100 ms | | | |
| 24 V | I _e | Α | 2 |
| 60 V | l _e | Α | 1 |
| 110 V | I _e | Α | 0.5 |

| 220 V | l _e | Α | 0.25 |
|---|----------------|-------------------|---|
| Lifespan | | S | |
| Lifespan, mechanical | Operations | x 10 ⁶ | > 0.05 |
| Lifespan, electrical | Operations | x 10 ⁶ | 0.05 |
| Control circuit reliability | Failure rate | λ | $<\!10^{-8}$, $<$ one failure at 100 million operations (at Ue $=24$ V DC, U_{min} = 17 V, I_{min} = 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^2 | 0,75 - 1,5 |
| Solid or stranded | | AWG | 18 - 14 |
| Rating data for approved types | | | |
| Pilot Duty | | | |
| AC operated | | | A600 |
| DC operated | | | 0300 |
| General Use | | | |
| AC | | V | 600 |
| AC | | Α | 5 |
| DC | | V | 250 |
| DC | | Α | 1 |

Design verification as per IEC/EN 61439

| besign vermoution as per 120/211 01-103 | | | |
|---|-------------------|----|--|
| Technical data for design verification | | | |
| Rated operational current for specified heat dissipation | In | Α | 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 |
| 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. |

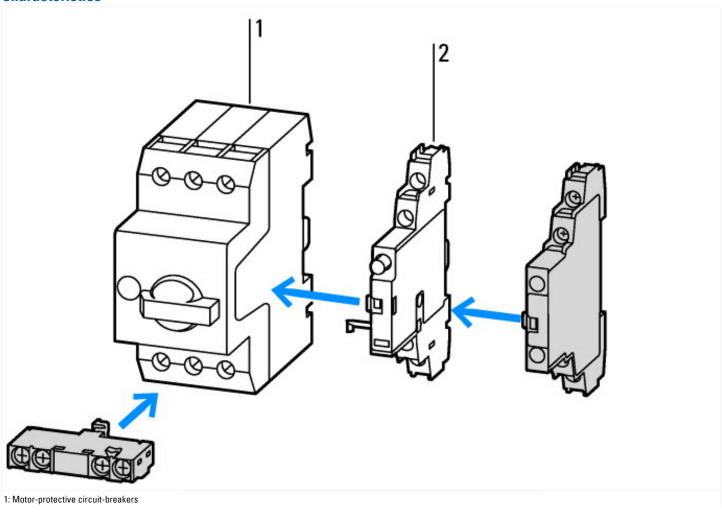
Technical data ETIM 8.0

| Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041) | | | |
|--|--|---|------------------|
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss10.0.1-27-37-13-02 [AKN342013]) | | | |
| Number of contacts as change-over contact | | | 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 | | Α | 3.5 |
| Type of electric connection | | | Screw connection |
| Model | | | Top mounting |
| Mounting method | | | Side mounting |
| Lamp holder | | | None |

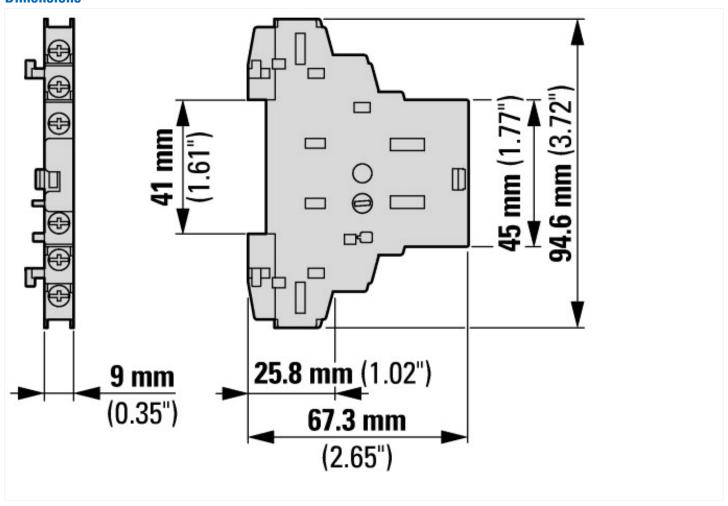
Approvals

| 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 |

Characteristics



Dimensions



Additional product information (links)

| Additional product information (miks) | | | |
|--|--|--|--|
| IL03402034Z (AWA1210-1945) Motor-protective circuit-breaker, Starter | | | |
| IL03402034Z (AWA1210-1945) Motor-protective circuit-breaker, Starter | https://es-assets.eaton.com/D0CUMENTATION/AWA_INSTRUCTIONS/IL03402034Z2021_06.pdf | | |
| IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker | | | |
| IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker | https://es-assets.eaton.com/D0CUMENTATION/AWA_INSTRUCTIONS/IL03407011Z.pdf | | |
| Motor starters and "Special Purpose Ratings" for the North American market | http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf | | |
| Busbar Component Adapters for modern Industrial control panels | http://www.moeller.net/binary/ver_techpapers/ver960en.pdf | | |