

# CERTIFICATE

Issued to:  
Applicant:  
**Zhejiang Chint Electrics Co., Ltd.**  
No. 1, Chint Road, Chint Industrial Zone, North  
Baixiang, Yueqing,  
325603 Zhejiang, China

Licensee:  
**Zhejiang Chint Electrics Co., Ltd.**  
No. 1, Chint Road, Chint Industrial Zone, North  
Baixiang, Yueqing,  
325603 Zhejiang, China

Product : Air Circuit-Breaker  
Trade name(s) : CHINT  
Type(s)/model(s) : NXA40H and NXA40S

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

DEKRA hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard(s) IEC 60947-2:2016, IEC 60947-2:2016/A1:2019, EN 60947-2:2017, EN 60947-2:2017/A1:2020, IEC 60947-5-1:2016 and EN 60947-5-1:2017
- an inspection of the factory location according to CENELEC Operational Document CIG 021
- a DEKRA certification agreement with the number 2032236

DEKRA hereby grants the right to use the KEMA-KEUR certification mark.

The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration and under the conditions of the KEMA-KEUR certification agreement.

This certificate is issued on 21 December 2022 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-126513

DEKRA Certification B.V.



B.T.M. Holtus  
Managing Director



M. Triulzi  
Certification Manager

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DUTCH ACCREDITATION  
COUNCIL



**SPECIFICATION OF THE CERTIFIED PRODUCT****Product data**

|  |   |
|--|---|
| Product  | : Air Circuit-Breaker   |
| Trade name(s)                                  | : CHINT   |
| Type(s)/model(s)                               | : NXA40H and NXA40S   |
| Number of poles                                | : 3P or 4P  |
| Rated operational voltage (Ue)                 | : 380 / 400 / 415 Vac, 440 / 525 / 690 Vac  |
| Rated insulation voltage (Ui)                  | : 1000 V for main circuit<br>415 V for control circuit<br>415 V for auxiliary circuit   |
| Rated impulse withstand voltage (Uimp)         | : 12 kV for main circuit<br>6 kV for control circuit<br>6 kV for auxiliary circuit  |
| Rated frequency                                | : 50 / 60 Hz  |
| Rated current (In)                             | : 4000 A, 3600 A, 3200 A  |
| Conventional thermal current (Ith)             | : Equal to In   |
| Current rating for four-pole circuit-breakers  | : 50% In, 100% In adjustable  |
| Individual pole short-circuit (Itr)            | : 12 In at 380 / 400 / 415 / 440 / 525 Vac  |
| Suitable for isolation                         | : Suitable  |
| Selectivity category                           | : B   |
| Safety distance (screen-circuit breaker)       | : Left / Right: 0 mm<br>Up / Down: 0 mm<br>Front / Back: 0 mm   |
| Reference temperature                          | : Independent   |
| Method of mounting                             | : Fixed or Withdrawable   |
| EMC environment                                | : A   |
| Tightening torque for terminals                | : 50 Nm for M12   |
| Line/load terminal                             | : Immaterial  |
| Connection                                     | : Copper busbar<br>For In = 3200 A,<br>cross-sectional area of conductor (mm <sup>2</sup> ): (100 x 10) mm <sup>2</sup> x 4<br>For In = 3600 A - 4000 A,<br>cross-sectional area of conductor (mm <sup>2</sup> ): (100 x 10) mm <sup>2</sup> x 5                        |
| Electronic trip unit type(s)                   | : NKD6 series:<br>NKD6-M, NKD6-A, NKD6-P and NKD6-H   |
| Inverse time delay release                     | : Ir (inverse time delay tripping setting):<br>For trip units: NKD6-P, NKD6-H<br>(0,4 - 1) x In, in steps of 1 A<br>For trip units: NKD6-M and NKD6-A<br>(0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 1) x In   |
| Time setting of the inverse time delay release | : tr (inverse time delay tripping setting):<br>1 s / 2 s / 4 s / 8 s / 12 s / 16 s / 20 s / 24 s,<br>with tolerance of $\pm 15\%$ (at 6 Ir)<br>2 Ir tripping time declared by the manufacturer:<br>when tr = 1 s: 7,65 s - 10,35 s<br>when tr = 24 s: 183,6 s - 248,4 s |
| Short time delay release                       | : Isd (short time delay tripping setting):<br>For trip units: NKD6-P, NKD6-H<br>(2 - 10) x Ir, in steps of 1 A<br>For trip units: NKD6-M and NKD6-A<br>(2 / 3 / 4 / 5 / 6 / 8 / 10) x Ir  |



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| Time setting of the short time delay release | : tsd (short time delay tripping setting):<br>I <sup>2</sup> t off: 0,1 s / 0,2 s / 0,3 s / 0,4 s<br>0,1 s, with tolerance of 60 ms - 140 ms<br>0,2 s, with tolerance of 160 ms - 240 ms<br>0,3 s, with tolerance of 255 ms - 345 ms<br>0,4 s, with tolerance of 340 ms - 460 ms<br>non-tripping duration stated by the manufacturer:<br>0,1 s: 50 ms<br>0,2 s: 140 ms<br>0,3 s: 250 ms<br>0,4 s: 330 ms |
| Instantaneous release                        | : li (instantaneous tripping setting): Max 50 kA<br>For trip units: NKD6-P, NKD6-H<br>(2 - 15) x I <sub>n</sub> , in steps of 1 A<br>For trip units: NKD6-M and NKD6-A<br>(2 / 4 / 6 / 8 / 10 / 12 / 15) x I <sub>n</sub>  |
| Making current release (MCR)                 | : 26 kA  |
| Ground fault release                         | : lg (ground fault release tripping setting):<br>For trip units: NKD6-P and NKD6-H<br>500 A - 1200 A, in steps of 1 A<br>For trip units: NKD6-M and NKD6-A<br>500 A / 640 A / 800 A / 960 A / 1040 A / 1120 A / 1200 A   |
| Time setting of the ground fault release     | : tg (ground fault release tripping setting):<br>I <sup>2</sup> t off: 0,1 s / 0,2 s / 0,3 s / 0,4 s<br>0,1 s, with tolerance of 60 ms - 140 ms<br>0,2 s, with tolerance of 160 ms - 240 ms<br>0,3 s, with tolerance of 255 ms - 345 ms<br>0,4 s, with tolerance of 340 ms - 460 ms  |
| Shunt release                                | : 220 / 230 / 240 Vac, 380 / 400 / 415 Vac; 50 / 60 Hz<br>110 Vdc, 220 Vdc   |
| Under-voltage release                        | : 220 / 230 / 240 Vac, 380 / 400 / 415 Vac; 50 / 60 Hz   |
| Closing coil                                 | : 220 / 230 / 240 Vac, 380 / 400 / 415 Vac; 50 / 60 Hz<br>110 Vdc, 220 Vdc   |
| Stored energy motor                          | : 220 / 230 / 240 Vac, 380 / 400 / 415 Vac; 50 / 60 Hz<br>110 Vdc, 220 Vdc   |
| Power modules for trip unit                  | : 220 / 230 / 240 Vac, 380 / 400 / 415 Vac; 50 / 60 Hz<br>110 Vdc, 220 Vdc   |
| Auxiliary circuits                           | : 6NO6NC, 4NO4NC<br>AC-15: 1,3 A at 240 Vac, 0,75 A at 415 Vac; 50 / 60 Hz<br>DC-13: 0,55 A at 110 Vdc, 0,27 A at 220 Vdc<br>Ui: 415 V, U <sub>imp</sub> : 6 kV, I <sub>th</sub> : 6 A<br>rated conditional short-circuit current: 1 kA<br>SCPD: NT00-6, 6 A   |

#### Product data – type NXA40H

|   |  |
|---|--|
| Rated service short-circuit breaking capacity (I <sub>cs</sub> )  | : 85 kA at 380 / 400 / 415 Vac<br>75 kA at 440 / 525 / 690 Vac   |
| Rated ultimate short-circuit breaking capacity (I <sub>cu</sub> ) | : 100 kA at 380 / 400 / 415 Vac<br>75 kA at 440 / 525 / 690 Vac  |
| Rated short-time withstand current (I <sub>cw</sub> )             | : 85 kA / 1 s at 380 / 400 / 415 Vac<br>50 kA / 3 s at 380 / 400 / 415 Vac<br>75 kA / 1 s at 440 / 525 / 690 Vac |

#### Product data – type NXA40S

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|--|--|
| Rated service short-circuit breaking capacity (I <sub>cs</sub> ) | : 85 kA at 380 / 400 / 415 Vac<br>75 kA at 440 / 525 / 690 Vac |
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| Rated ultimate short-circuit breaking capacity (Icu) | : 85 kA at 380 / 400 / 415 Vac<br>75 kA at 440 / 525 / 690 Vac   |
| Rated short-time withstand current (Icw)             | : 85 kA / 1 s at 380 / 400 / 415 Vac<br>50 kA / 3 s at 380 / 400 / 415 Vac<br>75 kA / 1 s at 440 / 525 / 690 Vac |

## TESTS

### Test requirements

IEC 60947-2:2016  
IEC 60947-2:2016/A1:2019  
EN 60947-2:2017  
EN 60947-2:2017/A1:2020  
IEC 60947-5-1:2016  
EN 60947-5-1:2017

### Test result

The test results are laid down in DEKRA test file 332630500.

### Additional information

Nomenclature breakdown  
NXA40S / x, NXA40H / x  
x- represents number of poles, 4 for 4P, blank for 3P

The referred test reports are 3326305.50, 3312363.51, CQC CB test reports no. 00901-CB2016CQC-070733 issued on 2016-08-04 and no. 00901-CB2016CQC-070733-M1 issued on 2017-06-29 with CQC CB test certificate no. CN38435-M1 issued on 2017-07-14.

This certificate replaces certificate No. 33-106718 which we hereby declare invalid.

### Conclusion

The examination proved that all requirements were met.

### Factory location

Zhejiang Chint Electrics Co., Ltd.  
No. 1318, Binhai No. 2 Avenue, Economic and Technical Development Zone,  
325025 Wenzhou Zhejiang, China