

# CERTIFICATE

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

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

Product : Air Circuit Breaker  
Trade name(s) : CHINT  
Type(s)/model(s) : NA1-1000 and NA1-1000X

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 EN 60947-2:2006, EN 60947-2:2006/A1:2009, EN 60947-2:2006/A2:2013, EN 60947-5-1:2004 and EN 60947-5-1:2004/A1:2009
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a 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 of the KEMA-KEUR certification agreement and under the conditions of the KEMA-KEUR certification agreement.

This certificate is issued on 24 August 2017 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-101068

DEKRA Certification B.V.



drs. G.J. Zoetbrood  
Managing Director



Rosa Zhou  
Certification Manager

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## SPECIFICATION OF THE CERTIFIED PRODUCT

### Product data

Product	: Air Circuit Breaker
Trade name(s)	: CHINT
Type(s)/model(s)	: NA1-1000 and NA1-1000X
Number of poles	: 3 P and 4P (unprotected N pole)
Protected pole	: 3
Rated operational voltage (Ue)	: 400 Vac / 690 Vac
Rated insulation voltage (Ui)	: 800 V for main circuit 400 V for control circuits and auxiliary circuits
Rated impulse withstand voltage (Uimp)	: 8 kV for main circuit 4 kV for control circuits and auxiliary circuits
Rated current (In)	: 200 A, 400 A, 630 A, 800 A, 1000 A
Rated operational current (Ie)	: (0,4 - 1,0) x In
Conventional thermal current (Ith)	: Equal to In
Current rating for four-pole circuit-breakers	: Equal to 50% In
Rated frequency	: 50 / 60 Hz
Rated ultimate short-circuit breaking capacity (Icu)	: 42 kA at 400 Vac, 25 kA at 690 Vac
Rated service short-circuit breaking capacity (Ics)	: 30 kA at 400 Vac, 20 kA at 690 Vac
Rated short-time withstand current (Icw)	: 30 kA / 1s at 400 Vac, 20 kA / 1s at 690 Vac
Suitable for isolation	: Suitable
Utilization category	: B
Safety distance (screen-circuit breaker)	: All sides: 0 mm
Method of mounting	: Fixed or Withdrawable
EMC environment	: A
Circuit-breaker for use on phase-earthed systems	: N/A
Circuit-breaker for use in IT systems	: N/A
Reference temperature	: Independent
Shunt release	: AC: 400 V, 50 / 60 Hz
Under-voltage release	: AC: 400 V, 50 / 60 Hz
Closing coil	: AC: 400 V, 50 / 60 Hz
Stored energy motor	: AC: 400 V, 50 / 60 Hz
Auxiliary circuits	: Utilization category: AC-15: 1,3 A at 230 Vac, 0,25 at 400 Vac, 50 / 60 Hz DC-13: 0,55 A at 110 Vdc, 0,27 A at 220 Vdc number and kind of contact elements: 4 NO and 4 NC rated conditional short-circuit current: 1 kA conventional free air thermal current (Ith): 6 A kind of protective device: fuse, RL6-25/6, gG, 6 A, 500 V, 7,5 kA
Line/load terminal	: Immaterial
Connection	: Prepared copper conductor with cable lug for 200 A to 800 A Copper busbar for 1000 A
Rated tightening torque for terminals	: 14 Nm

### Product data – type NA1-1000

Type of electronic release	: NKD3
Inverse time delay release	: Ir (inverse time delay tripping setting): (0,4, 0,5, 0,6, 0,7, 0,8, 0,9, 1,0) x In



Time setting of the inverse time delay release	: tr (inverse time delay tripping setting): 30 s, 60 s, 120 s, 240 s with tolerance of $\pm 10\%$ (at 1,5 Ir) Trip time at 2 Ir: Set at 30 s: 16,9 s, with tolerance of $\pm 10\%$ Set at 240 s: 135 s, with tolerance of $\pm 10\%$
Short time delay release	: Isd (short time delay tripping setting): (3, 4, 5, 6, 7, 8, 10) x Ir
Time setting	: tsd (short time delay tripping setting): 0,2 s, 0,4 s, with tolerance of $\pm 25\%$ Non-tripping duration: Set at 0,2 s: 0,13 s, Set at 0,4 s: 0,25 s
Instantaneous release	: li (instantaneous tripping setting): (3, 4, 6, 8, 10, 12, 15) x In
Ground fault release	: (0,2, 0,3, 0,4, 0,5, 0,6, 0,7, 0,8) x In tg: 0,2 s, 0,4 s, 0,6 s, 0,8 s with tolerance of $\pm 25\%$
Making current release	: 13 kA
Time setting of ground fault release	: tg: 0,2 s, 0,4 s, 0,6 s, 0,8 s with tolerance of $\pm 25\%$
Making current release	: 13 kA

### Product data – type NA1-1000X

Type of electronic release	: NST1-D
Inverse time delay release	: Ir (inverse time delay tripping setting): (0,4 - 1,0) x In, in step of 1 A
Time setting of the inverse time delay release	: tr (inverse time delay tripping setting): 15 s, 30 s, 60 s, 120 s, 240 s, 480 s with tolerance of $\pm 10\%$ (at 1,5 Ir) Trip time at 2 Ir: Set at 15 s: 8,4 s, with tolerance of $\pm 10\%$ , Set at 480 s: 270 s, with tolerance of $\pm 10\%$
Short time delay release	: Isd (short time delay tripping setting): (1,5 - 15) x Ir, in step of 1 A, if li < 10 kA, in step of 0,01 kA, if li $\geq 10$ kA
Time setting	: tsd (short time delay tripping setting): 0,1 s, 0,2 s, with tolerance of $\pm 40$ ms, 0,3 s, 0,4 s, with tolerance of $\pm 15\%$ Non-tripping duration: Set at 0,1 s: 0,05 s, Set at 0,4 s: 0,33 s
Instantaneous release	: li (instantaneous tripping setting): (1,5 - 20) x In, in step of 1 A, if li < 10 kA, in step of 0,01 kA, if li $\geq 10$ kA
Ground fault release	: Ig: (0,2 - 0,8) x In, in step of 1 A (with minimum current setting 100 A, if In = 200 A, 400 A)
Time setting of ground fault release	: tg: 0,1 s, 0,2 s, with tolerance of $\pm 40$ ms 0,3 s, 0,4 s, with tolerance of $\pm 15\%$
Making current release	: 6,3 kA (200 A - 400 A), 12,6 kA (400 A - 1000 A),

## TESTS

### Test requirements

EN 60947-2:2006

EN 60947-2:2006/A1:2009

EN 60947-2:2006/A2:2013

EN 60947-5-1:2004  
EN 60947-5-1:2004/A1:2009

**Test result**

The test results are laid down in DEKRA test file 331181200.

**Additional Information**

Nomenclature breakdown:

NA1-1000X/4

a    b    c d

a = Model name: NA1

b = Frame size: 1000

c = Electronic release: X means NST1-D , blank means NKD3

d = pole numbers: '3' means 3P ACBs, '4' means 4P ACBs

The referred test reports are 3311812.50, 3307984.50, 3300977.50, W0808013.50 and W0808013.52.  
This certificate replaces certificate no. 3307984.01 issued on 2015-08-17.

The product also complies with IEC 60947-2:2016 and IEC 60947-5-1:2003 and A1:2009.

**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,  
Wenzhou, Zhejiang, China