

ATTESTATION OF CONFORMITY

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

For the product: Air Circuit Breaker

Trade name: CHINT

Type/Model: NA1-2000, NA1-2000N, NA1-2000H, NA1-2000X, NA1-2000XN, NA1-2000XH

Ratings: Ue: 400 Vac / 415 Vac / 690 Vac, In: 630 A, 800 A, 1000 A, 1250 A, 1600 A, 2000 A
Ui: 1000 V, Uimp: 12 kV, 3P and 4P (N pole does not have overcurrent protection,
but has ground fault protection)
see other technical data on annex pages

Manufactured by: Zhejiang Chint Electrics Co., Ltd.
No. 1, Chint Road, Chint Industrial Zone, North Baixiang, Yueqing, Zhejiang, China

Subject: Type 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, IEC 60947-2:2016,
IEC 60947-5-1:2003, A1:2009

Remark: This Attestation replaces AoC no. 3308633.01A issued on 2015-11-30.

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in test reports no. 3311813.50 issued on 2017-11-28, 3311324.50 issued on 2017-04-05, 3308633.50 issued on 2015-11-30, 3303046.50 issued on 2012-09-06, W0707121.50 issued on 2007-12-03, S0501025.50 issued on 2005-12-20 and ITS CB test report no. 201044-1 issued on 2002-11-21.

This Attestation implies that the examined types are in accordance with the standards designated under the Low voltage directive (LVD) 2014/35/EU.

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

Wenzhou, Zhejiang, 05 December 2017 Number: 3311813.01A

DEKRA Testing Services (Zhejiang) Co., Ltd.

Ms J Guo
Certification Manager

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The CE marking may be affixed on the product if all relevant and effective EC directives are complied with.



Ratings:

number of poles	:	3 P and 4P (N pole does not have overcurrent protection, but has ground fault protection)
protected pole	:	3 or 4
rated operational voltage (Ue)	:	400 Vac / 415 Vac / 690 Vac
rated insulation voltage (Ui)	:	1000 V for main circuit 400 V for control circuits and auxiliary circuits
rated impulse withstand voltage (Uimp)	:	12 kV for main circuit 6 kV for control circuits and auxiliary circuits
rated current (In)	:	630 A, 800 A, 1000 A, 1250 A, 1600 A, 2000 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 In
rated frequency	:	50 / 60 Hz
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
reference temperature	:	Independent
shunt release	:	AC: 127 V, 220 -230 V, 380 - 400 V, 50 / 60 Hz DC: 110 V, 220 V
under-voltage release	:	AC: 127 V, 220 -230 V, 380 - 400 V, 50 / 60 Hz DC: 110 V, 220 V
closing coil	:	AC: 127 V, 220 -230 V, 380 - 400 V, 50 / 60 Hz DC: 110 V, 220 V
stored energy motor	:	AC: 127 V, 220 -230 V, 380 - 400 V, 50 / 60 Hz DC: 110 V, 220 V
auxiliary circuits	:	Utilization category: AC-15: 1,3 A at 230 Vac, 0,75 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 or 6 NO and 6 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 connection	:	Immaterial Prepared copper conductor with cable lug for 630 A to 800 A Copper busbar for 1000 A to 2000 A
rated tightening torque for terminals	:	50 Nm

Ratings - type NA1-2000

type of electronic release	:	NST1-C
rated ultimate short-circuit breaking capacity (Icu)	:	80 kA at 400 Vac, 50 kA at 415 / 690 Vac
rated service short-circuit breaking capacity (Ics)	:	65 kA at 400 Vac, 40 kA at 415 / 690 Vac
rated short-time withstand current (Icw)	:	50 kA / 1 s at 400 Vac, 40 kA / 1 s at 415 / 690 Vac 42 kA / 3 s at 415 Vac
inverse time delay release	:	I _r (inverse time delay tripping setting): (0,4 - 1,0) x I _n , in step of 1 A
time setting of the inverse time delay release	:	t _r (inverse time delay tripping setting): 15 s, 30 s, 60 s, 120 s, 240 s, 480 s with tolerance of ± 10% (at 1,5 I _r) Trip time at 2 I _r : Set at 15 s: 8,4 s, with tolerance of ± 10%, Set at 480 s: 270 s, with tolerance of ± 10%
short time delay release	:	I _{sd} (short time delay tripping setting): (1,3125 - 15) x I _r , in step of 1 A, if I _i < 10 kA, in step of 0,01 kA, if I _i ≥ 10 kA
time setting	:	t _{sd} (short time delay tripping setting): 0,1 s, 0,2 s, with tolerance of ± 32 ms, 0,3 s, 0,4 s, with tolerance of ± 25% Non-tripping duration: Set at 0,1 s: 0,06 s, Set at 0,4 s: 0,25 s
instantaneous release	:	I _i (instantaneous tripping setting): 1,3125 I _n - 50 kA, in step of 1 A, if I _i < 10 kA, in step of 0,01 kA, if I _i ≥ 10 kA
ground fault release	:	I _g : (0,2 - 0,8) x I _n , in step of 1 A (with minimum current setting 160 A, if I _n = 630 A) Characteristic specified by manufacturer: When the fault current is 0,9 I _g , ACB shall not trip within 2 t _g , When the fault current is 1,1 I _g , ACB shall trip within the limits of t _g
time setting of ground fault release	:	t _g : 0,1 s, 0,2 s, with tolerance of ± 32 ms 0,3 s, 0,4 s, with tolerance of ± 25%
Making current release	:	16 kA

Ratings - type NA1-2000H

type of electronic release	:	NST1-C
rated ultimate short-circuit breaking capacity (Icu)	:	65 kA at 400 Vac, 50 kA at 415 / 690 Vac
rated service short-circuit breaking capacity (Ics)	:	65 kA at 400 Vac, 40 kA at 415 / 690 Vac
rated short-time withstand current (Icw)	:	50 kA / 1 s at 400 Vac, 40 kA / 1 s at 415 / 690 Vac 42 kA / 3 s at 415 Vac
inverse time delay release	:	I _r (inverse time delay tripping setting): (0,4 - 1,0) x I _n , in step of 1 A
time setting of the inverse time delay release	:	t _r (inverse time delay tripping setting): 15 s, 30 s, 60 s, 120 s, 240 s, 480 s with tolerance of ± 10% (at 1,5 I _r) Trip time at 2 I _r : Set at 15 s: 8,4 s, with tolerance of ± 10%, Set at 480 s: 270 s, with tolerance of ± 10%
short time delay release	:	I _{sd} (short time delay tripping setting): (1,3125 - 15) x I _r , in step of 1 A, if I _{li} < 10 kA, in step of 0,01 kA, if I _{li} ≥ 10 kA
time setting	:	t _{sd} (short time delay tripping setting): 0,1 s, 0,2 s, with tolerance of ± 32 ms, 0,3 s, 0,4 s, with tolerance of ± 25% Non-tripping duration: Set at 0,1 s: 0,06 s, Set at 0,4 s: 0,25 s
instantaneous release	:	I _{li} (instantaneous tripping setting): 1,3125 I _n - 50 kA, in step of 1 A, if I _{li} < 10 kA, in step of 0,01 kA, if I _{li} ≥ 10 kA
ground fault release	:	I _g : (0,2 - 0,8) x I _n , in step of 1 A (with minimum current setting 160 A, if I _n = 630 A) Characteristic specified by manufacturer: When the fault current is 0,9 I _g , ACB shall not trip within 2 t _g , When the fault current is 1,1 I _g , ACB shall trip within the limits of t _g
time setting of ground fault release	:	t _g : 0,1 s, 0,2 s, with tolerance of ± 32 ms 0,3 s, 0,4 s, with tolerance of ± 25%
Making current release	:	16 kA

Ratings - type NA1-2000N

type of electronic release	:	NST1-C
rated ultimate short-circuit breaking capacity (Icu)	:	50 kA at 400 Vac, 40 kA at 415 / 690 Vac
rated service short-circuit breaking capacity (Ics)	:	50 kA at 400 Vac, 40 kA at 415 / 690 Vac
rated short-time withstand current (Icw)	:	50 kA / 1 s at 400 Vac, 40 kA / 1 s at 415 / 690 Vac 42 kA / 3 s at 415 Vac
inverse time delay release	:	I _r (inverse time delay tripping setting): (0,4 - 1,0) x I _n , in step of 1 A
time setting of the inverse time delay release	:	t _r (inverse time delay tripping setting): 15 s, 30 s, 60 s, 120 s, 240 s, 480 s with tolerance of ± 10% (at 1,5 I _r) Trip time at 2 I _r : Set at 15 s: 8,4 s, with tolerance of ± 10%, Set at 480 s: 270 s, with tolerance of ± 10%
short time delay release	:	I _{sd} (short time delay tripping setting): (1,3125 - 15) x I _r , in step of 1 A, if I _i < 10 kA, in step of 0,01 kA, if I _i ≥ 10 kA
time setting	:	t _{sd} (short time delay tripping setting): 0,1 s, 0,2 s, with tolerance of ± 32 ms, 0,3 s, 0,4 s, with tolerance of ± 25% Non-tripping duration: Set at 0,1 s: 0,06 s, Set at 0,4 s: 0,25 s
instantaneous release	:	I _i (instantaneous tripping setting): 1,3125 I _n - 50 kA, in step of 1 A, if I _i < 10 kA, in step of 0,01 kA, if I _i ≥ 10 kA
ground fault release	:	I _g : (0,2 - 0,8) x I _n , in step of 1 A (with minimum current setting 160 A, if I _n = 630 A) Characteristic specified by manufacturer: When the fault current is 0,9 I _g , ACB shall not trip within 2 t _g , When the fault current is 1,1 I _g , ACB shall trip within the limits of t _g
time setting of ground fault release	:	t _g : 0,1 s, 0,2 s, with tolerance of ± 32 ms 0,3 s, 0,4 s, with tolerance of ± 25%
making current release	:	16 kA

Ratings - type NA1-2000X

type of electronic release	: NST1-D
rated ultimate short-circuit breaking capacity (Icu)	: 80 kA at 400 Vac, 50 kA at 415 / 690 Vac
rated service short-circuit breaking capacity (Ics)	: 65 kA at 400 Vac, 40 kA at 415 / 690 Vac
rated short-time withstand current (Icw)	: 50 kA / 1 s at 400 Vac, 40 kA / 1 s at 415 / 690 Vac 42 kA / 3 s at 415 Vac
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 ± 10% (at 1,5 Ir) Trip time at 2 Ir: Set at 15 s: 8,4 s, with tolerance of ± 10%, Set at 480 s: 270 s, with tolerance of ± 10%
short time delay release	: Isd (short time delay tripping setting): (1,5 - 15) x Ir, in step of 1 A, if Ii < 10 kA, in step of 0,01 kA, if Ii ≥ 10 kA
time setting	: tsd (short time delay tripping setting): 0,1 s, 0,2 s, with tolerance of ± 40 ms, 0,3 s, 0,4 s, with tolerance of ± 15% Non-tripping duration: Set at 0,1 s: 0,05 s, Set at 0,4 s: 0,33 s
instantaneous release	: Ii (instantaneous tripping setting): 1,5 In - 50 kA, in step of 1 A, if Ii < 10 kA, in step of 0,01 kA, if Ii ≥ 10 kA
ground fault release	: Ig: (0,2 - 0,8) x In, in step of 1 A (with maximum current setting 1200 A, if In = 1600 A and 2000 A)
time setting of ground fault release	: tg: 0,1 s, 0,2 s, with tolerance of ± 40 ms 0,3 s, 0,4 s, with tolerance of ± 15%
making current release	: 16 kA

Ratings - type NA1-2000XH

type of electronic release	: NST1-D
rated ultimate short-circuit breaking capacity (Icu)	: 65 kA at 400 Vac, 50 kA at 415 / 690 Vac
rated service short-circuit breaking capacity (Ics)	: 65 kA at 400 Vac, 40 kA at 415 / 690 Vac
rated short-time withstand current (Icw)	: 50 kA / 1 s at 400 Vac, 40 kA / 1 s at 415 / 690 Vac 42 kA / 3 s at 415 Vac
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 ≥ 10 kA
time setting	: tsd (short time delay tripping setting): 0,1 s, 0,2 s, with tolerance of ± 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 In - 50 kA, in step of 1 A, if li < 10 kA, in step of 0,01 kA, if li ≥ 10 kA
ground fault release	: lg: (0,2 - 0,8) x In, in step of 1 A (with maximum current setting 1200 A, if In = 1600 A and 2000 A)
time setting of ground fault release	: tg: 0,1 s, 0,2 s, with tolerance of ± 40 ms 0,3 s, 0,4 s, with tolerance of $\pm 15\%$
making current release	: 16 kA

Ratings - type NA1-2000XN

type of electronic release	:	NST1-D
rated ultimate short-circuit breaking capacity (Icu)	:	50 kA at 400 Vac, 40 kA at 415 / 690 Vac
rated service short-circuit breaking capacity (Ics)	:	50 kA at 400 Vac, 40 kA at 415 / 690 Vac
rated short-time withstand current (Icw)	:	50 kA / 1 s at 400 Vac, 40 kA / 1 s at 415 / 690 Vac 42 kA / 3 s at 415 Vac
inverse time delay release	:	I _r (inverse time delay tripping setting): (0,4 - 1,0) x I _n , in step of 1 A
time setting of the inverse time delay release	:	t _r (inverse time delay tripping setting): 15 s, 30 s, 60 s, 120 s, 240 s, 480 s with tolerance of ± 10% (at 1,5 I _r) Trip time at 2 I _r : Set at 15 s: 8,4 s, with tolerance of ± 10%, Set at 480 s: 270 s, with tolerance of ± 10%
short time delay release	:	I _{sd} (short time delay tripping setting): (1,5 - 15) x I _r , in step of 1 A, if I _i < 10 kA, in step of 0,01 kA, if I _i ≥ 10 kA
time setting	:	t _{sd} (short time delay tripping setting): 0,1 s, 0,2 s, with tolerance of ± 40 ms, 0,3 s, 0,4 s, with tolerance of ± 15% Non-tripping duration: Set at 0,1 s: 0,05 s, Set at 0,4 s: 0,33 s
instantaneous release	:	I _i (instantaneous tripping setting): 1,5 I _n - 50 kA, in step of 1 A, if I _i < 10 kA, in step of 0,01 kA, if I _i ≥ 10 kA
ground fault release	:	I _g : (0,2 - 0,8) x I _n , in step of 1 A (with maximum current setting 1200 A, if I _n = 1600 A and 2000 A)
time setting of ground fault release	:	t _g : 0,1 s, 0,2 s, with tolerance of ± 40 ms 0,3 s, 0,4 s, with tolerance of ± 15%
making current release	:	16 kA

Additional information

Nomenclature breakdown:

NA1-2000XH/4

a b c d e

a = Model name: NA1

b = Frame size: 2000

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

d = short-circuit capacity, 'N', 'H' or 'blank'

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