

CERTIFICATE

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

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) : NA1-6300, NA1-6300N, NA1-6300X and NA1-6300XN

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 and EN 60947-2:2006/A2:2013
- 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 13 December 2017 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-102107

DEKRA Certification B.V.



drs. G.J. Zoetbrood
Managing Director



Henk Barends
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)	: NA1-6300, NA1-6300N, NA1-6300X and NA1-6300XN
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)	: 4000 A, 5000 A, 6300 A for 3P 4000 A, 5000 A for 4P
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	: 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 A 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	: Immaterial
Connection	: Copper busbar: (100 x 10) mm ² x 5, if In = 4000 A (100 x 10) mm ² x 7, if In = 5000 A (100 x 10) mm ² x 8, if In = 6300 A
Rated tightening torque for terminals	: 50 Nm

Product data – type NA1-6300

Type of electronic release	: NST1-C
Rated ultimate short-circuit breaking capacity (Icu)	: 120 kA at 400 Vac, 85 kA at 415 / 690 Vac
Rated service short-circuit breaking capacity (Ics)	: 100 kA at 400 Vac, 75 kA at 415 / 690 Vac
Rated short-time withstand current (Icw)	: 100 kA / 1 s at 400 Vac, 75 kA / 1 s at 415 / 690 Vac 50 kA / 3 s at 400 / 415 Vac

Inverse time delay release	: Ir (inverse time delay tripping setting): (0,4 - 1,0) x In, in step of 2 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): (1,3125 - 15) x Ir, in step of 2 A, if li < 10 kA, in step of 0,02 kA, if li ≥ 10 kA (with maximum current setting 50 kA)
Time setting	: tsd (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	: li (instantaneous tripping setting): 1,3125 In - 70 kA, in step of 2 A, if li < 10 kA, in step of 0,02 kA, if li ≥ 10 kA
Ground fault release	: Ig: (0,2 - 0,8) x In, in step of 2 A Characteristic specified by manufacturer: When the fault current is 0,9 Ig, ACB shall not trip within 2 tg, When the fault current is 1,1 Ig, ACB shall trip within the limits of tg
Time setting of ground fault release	: tg: 0,1 s, 0,2 s, with tolerance of ± 32 ms 0,3 s, 0,4 s, with tolerance of ± 25%
Making current release	: 26 kA
 Product data – type NA1-6300N	
Type of electronic release	: NST1-C
Rated ultimate short-circuit breaking capacity (Icu)	: 100 kA at 400 Vac, 75 kA at 415 / 690 Vac
Rated service short-circuit breaking capacity (Ics)	: 100 kA at 400 Vac, 75 kA at 415 / 690 Vac
Rated short-time withstand current (Icw)	: 100 kA / 1 s at 400 Vac, 75 kA / 1 s at 415 / 690 Vac 50 kA / 3 s at 400 / 415 Vac
Inverse time delay release	: Ir (inverse time delay tripping setting): (0,4 - 1,0) x In, in step of 2 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): (1,3125 - 15) x Ir, in step of 2 A, if li < 10 kA, in step of 0,02 kA, if li ≥ 10 kA (with maximum current setting 50 kA)

Time setting	: tsd (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 $\pm 25\%$ Non-tripping duration: Set at 0,1 s: 0,06 s, Set at 0,4 s: 0,25 s
Instantaneous release	: li (instantaneous tripping setting): 1,3125 I_n - 70 kA, in step of 2 A, if $I_i < 10$ kA, in step of 0,02 kA, if $I_i \geq 10$ kA
Ground fault release	: Ig: (0,2 - 0,8) $\times I_n$, in step of 2 A Characteristic specified by manufacturer: When the fault current is 0,9 Ig, ACB shall not trip within 2 tg, When the fault current is 1,1 Ig, ACB shall trip within the limits of tg
Time setting of ground fault release	: tg: 0,1 s, 0,2 s, with tolerance of ± 32 ms 0,3 s, 0,4 s, with tolerance of $\pm 25\%$
Making current release	: 26 kA
 Product data – type NA1-6300X	
Type of electronic release	: NST1-D
Rated ultimate short-circuit breaking capacity (Icu)	: 120 kA at 400 Vac, 85 kA at 415 / 690 Vac
Rated service short-circuit breaking capacity (Ics)	: 100 kA at 400 Vac, 75 kA at 415 / 690 Vac
Rated short-time withstand current (Icw)	: 100 kA / 1 s at 400 Vac, 75 kA / 1 s at 415 / 690 Vac 50 kA / 3 s at 400 / 415 Vac
Inverse time delay release	: Ir (inverse time delay tripping setting): (0,4 - 1,0) $\times I_n$, in step of 2 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) $\times I_r$, in step of 2 A, if $I_i < 10$ kA, in step of 0,02 kA, if $I_i \geq 10$ kA (with maximum current setting 50 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 I_n - 75 kA, in step of 2 A, if $I_i < 10$ kA, in step of 0,02 kA, if $I_i \geq 10$ kA
Ground fault release	: Ig: 500 - 1200 A, in step of 2 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	: 26 kA

Product data – type NA1-6300XN

Type of electronic release	: NST1-D
Rated ultimate short-circuit breaking capacity (Icu)	: 100 kA at 400 Vac, 75 kA at 415 / 690 Vac
Rated service short-circuit breaking capacity (Ics)	: 100 kA at 400 Vac, 75 kA at 415 / 690 Vac
Rated short-time withstand current (Icw)	: 100 kA / 1 s at 400 Vac, 75 kA / 1 s at 415 / 690 Vac 50 kA / 3 s at 400 / 415 Vac
Inverse time delay release	: Ir (inverse time delay tripping setting): (0,4 - 1,0) x In, in step of 2 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 2 A, if Ii < 10 kA, in step of 0,02 kA, if Ii ≥ 10 kA (with maximum current setting 50 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 - 75 kA, in step of 2 A, if Ii < 10 kA, in step of 0,02 kA, if Ii ≥ 10 kA
Ground fault release	: Ig: 500 - 1200 A, in step of 2 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	: 26 kA

TESTS**Test requirements**

EN 60947-2:2006
EN 60947-2:2006/A1:2009
EN 60947-2:2006/A2:2013

Test result

The test results are laid down in DEKRA test file 331181500.

Additional information

Nomenclature breakdown:

NA1-6300XN/4

a b c d e

a = Model name: NA1

b = Frame size: 6300

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

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

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

The product also complies with IEC 60947-2:2006, A1:2009 and A2:2013 and IEC 60947-5-1:2003 and A1:2009.

This certificate replaces certificate no. 3308635.01 issued on 2015-11-30.

The referred test reports are 3311815.50, 3308635.50, 3303046.52, W0808013.51, W0808013.53, S0501025.52 and ITS CB test report no. 300628.

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