

# CERTIFICATE

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

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

Product(s) : Air Circuit Breaker  
Trade name(s) : CHINT  
Type(s)/model(s) : NA8G-1600, NA8G-6300

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;
- 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: 8 June 2011 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 2144283.01

DEKRA Certification B.V.



drs. G.J. Zoetbrood  
Managing Director

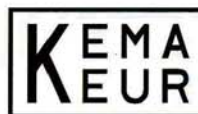


F.S. Strikwerda  
Certification Manager

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ACCREDITED BY  
THE DUTCH COUNCIL  
FOR ACCREDITATION



**Product data**

Product	:	Air Circuit Breaker
Trade name(s)	:	CHINT
Type(s)	:	NA8G-1600, NA8G-6300
Number of poles	:	3 P or 4 P (3P + N, N does not have overcurrent protection)
Rated frequency	:	50 / 60 Hz
Suitable for isolation	:	Suitable
Utilization category	:	B
Safety distance (screen-circuit breaker)	:	0 mm
Auxiliary contact	:	6 NO + 6 NC or 4 NO + 4 NC 1,3 A at 230 Vac 0,25 A at 400 Vac for NA8G-1600 0,75 A at 400 Vac for NA8G-6300 0,55 A at 110 Vdc 0,27 A at 220 Vdc AC-15, DC-13 U <sub>i</sub> = 400 V, U <sub>imp</sub> = 6 kV Rated conditional short-circuit current 1 kA SCPD fuse RL6 - 25 / 6, gG, 6 A, 500 V, 7,5 kA
Degree of protection	:	IP 20 (from front)
Method of mounting	:	Fixed or withdrawable
EMC Environment A or B	:	A
Conventional thermal current (I <sub>th</sub> )	:	Equal to I <sub>n</sub>
Electrical control circuits	:	Closing coil and motor for storing energy 230 Vac, 400 Vac, 50 Hz 220 Vdc, 110 Vdc
Shunt release	:	230 Vac, 400 Vac, 50 Hz 220 Vdc, 110 Vdc
Undervoltage release	:	230 Vac, 400 Vac, 50 Hz
Overcurrent releases	:	
Inverse time delay release	:	I <sub>r</sub> (inverse time delay tripping setting) 0,4 I <sub>n</sub> , 0,5 I <sub>n</sub> , 0,6 I <sub>n</sub> , 0,7 I <sub>n</sub> , 0,8 I <sub>n</sub> , 0,9 I <sub>n</sub> , 0,95 I <sub>n</sub> , 0,98 I <sub>n</sub> , 1 I <sub>n</sub>
Time settings	:	T <sub>r</sub> (inverse time delay tripping setting), 9 curves 1, 2, 4, 8, 12, 16, 20, 24, 30 (respectively tripping time at 6 I <sub>r</sub> ), with tolerance of ± 15% for all curves: > 2 hours non-tripping at 1,05 I <sub>R</sub> < 2 hours tripping at 1,3 I <sub>R</sub>
Instantaneous release	:	I <sub>i</sub> (instantaneous tripping setting) 2 I <sub>n</sub> , 3 I <sub>n</sub> , 4 I <sub>n</sub> , 6 I <sub>n</sub> , 8 I <sub>n</sub> , 10 I <sub>n</sub> , 12 I <sub>n</sub> , 15 I <sub>n</sub> , OFF
Time setting	:	Instantaneous
Short-time delay release	:	I <sub>sd</sub> (short time delay tripping setting), 9 curves 1,5 I <sub>r</sub> , 2 I <sub>r</sub> , 2,5 I <sub>r</sub> , 3 I <sub>r</sub> , 4 I <sub>r</sub> , 5 I <sub>r</sub> , 6 I <sub>r</sub> , 8 I <sub>r</sub> , 10 I <sub>r</sub>
Time setting	:	T <sub>sd</sub> (short time delay tripping setting, 1 <sup>2</sup> t off condition), 4 curves 0,1 s, 0,2 s, 0,3 s, 0,4 s, X The tripping time is equal to the value of setting with tolerance of ± 15%, X means OFF T <sub>sd</sub> (inverse time delay tripping setting, 1 <sup>2</sup> t on condition), 4 special curves 0,1 s, 0,2 s, 0,3 s, 0,4 s When the actual current is between the current setting and 10 I <sub>r</sub> , the tripping time is equal to (10 I <sub>r</sub> ) <sup>2</sup> x T <sub>sd</sub> / (I actual) <sup>2</sup> with tolerance of ± 15%

		When the actual current is more than 10 I <sub>r</sub> , the tripping time is equal to the value of setting with tolerance of ± 15%
Other releases		
Ground fault release	:	I <sub>g</sub> (Ground fault release) Current setting I <sub>g</sub> : A, B, C, D, E, F, G, H, J represent 500 A, 640 A, 720 A, 800 A, 880 A, 960 A, 1040 A, 1120 A, 1200 A respectively when I <sub>n</sub> > 1200 A 0,2 I <sub>n</sub> , 0,3 I <sub>n</sub> , 0,4 I <sub>n</sub> , 0,5 I <sub>n</sub> , 0,6 I <sub>n</sub> , 0,7 I <sub>n</sub> , 0,8 I <sub>n</sub> , 0,9 I <sub>n</sub> , 1 I <sub>n</sub> respectively when 400 A < I <sub>n</sub> ≤ 1200 A 0,3 I <sub>n</sub> , 0,3 I <sub>n</sub> , 0,4 I <sub>n</sub> , 0,5 I <sub>n</sub> , 0,6 I <sub>n</sub> , 0,7 I <sub>n</sub> , 0,8 I <sub>n</sub> , 0,9 I <sub>n</sub> , 1 I <sub>n</sub> respectively when I <sub>n</sub> ≤ 400 A
Time settings	:	T <sub>g</sub> (short time delay tripping setting, I <sup>2</sup> t off condition), 4 curves 0,1 s, 0,2 s, 0,3 s, 0,4 s, X The tripping time is equal to the value of setting with tolerance of ± 15%, X means OFF T <sub>g</sub> (inverse time delay tripping setting, I <sup>2</sup> t on condition), 4 special curves 0,1 s, 0,2 s, 0,3 s, 0,4 s When the actual current is between the current setting and I <sub>n</sub> , the tripping time is equal to [J <sup>2</sup> × T <sub>g</sub> / (I actual) <sup>2</sup> ] with tolerance of ± 15% When the actual current is equal or more than J, the tripping time is equal to the value of setting with tolerance of ± 15%
Making current release	:	The value is equal to I <sub>sd</sub> setting
Time settings	:	Instantaneous

**Product data - type NA8G-1600**

Rated operational voltage (U <sub>e</sub> )	:	415 V, 690 V
Rated insulation ovltage (U <sub>i</sub> )	:	690 Vac
Rated impulse withstand voltage (U <sub>imp</sub> )	:	8 kV
Rated current (I <sub>n</sub> )	:	200 A, 400 A, 630 A, 800 A, 1000 A, 1250 A, 1600 A
Rated operational current (I <sub>e</sub> )	:	0,4 I <sub>n</sub> , 0,5 I <sub>n</sub> , 0,6 I <sub>n</sub> , 0,7 I <sub>n</sub> , 0,8 I <sub>n</sub> , 0,9 I <sub>n</sub> , 0,95 I <sub>n</sub> , 0,98 I <sub>n</sub> , 1 I <sub>n</sub>
Rated ultimate short-circuit breaking capacity (I <sub>cu</sub> )	:	50 kA at 415 V 25 kA at 690 V
Rated service short-circuit breaking capacity (I <sub>cs</sub> )	:	40 kA at 415 V 20 kA at 690 V
Rated short-time withstand current I <sub>cw</sub> (kA / s)	:	40 kA / 1 s at 415 V 20 kA / 1 s at 690 V
Circuit breaker for use on phase-earthed systems	:	Yes, 25% I <sub>cu</sub> at 690 V
Circuit breaker for use in IT systems	:	N/A

**Product data - type NA8G-6300**

Rated operational voltage(Ue)	:	415 V
Rated insulation voltage (Ui)	:	1000 Vac
Rated impulse withstand voltage (Uimp)	:	12 kV
Rated current (In)	:	4000 A, 5000 A, 6300 A for 3 P 4000 A, 5000 A for 4 P
Rated operational current (Ie)	:	0,4 In, 0,5 In, 0,6 In, 0,7 In, 0,8 In, 0,9 In, 0,95 In, 0,98 In, 1 In
Rated ultimate short-circuit breaking capacity (Icu)	:	120 kA
Rated service short-circuit breaking capacity (Ics)	:	100 kA
Rated short-time withstand current Icw (kA / s)	:	100 kA / 1 s
Circuit breaker for use on phase-earthed systems	:	Yes, 50 kA
Circuit breaker for use in IT systems	:	Yes, 50 kA

**TESTS****Test requirements**

EN 60947-2:2006 + A1:2009

IEC 60947-2:2006 + A1:2009

**Test result**

The test results are laid down in DEKRA test file 2144283.01 and reports 3301166.50, 3301166.52, 3301166.53 and 3301166.54.

**Conclusion**

The examination proved that all test requirements were met.

Tested by : Fred Fu



Checked by : Eric Wang

**Factory locations**

Zhejiang CHINT Electric Co., Ltd.

No.1, Chint Road, Chint Industrial Zone, North Baixiang, Yueqing, Zhejiang  
P.R. China