

# 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) : NA8-4000H

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 60947-2:2017, EN 60947-5-1:2004/A1:2009 and EN 60947-5-1:2004
- 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 26 September 2018 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-105383

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)	: NA8-4000H
Number of poles	: 3P or 4P (N pole with protection)
Protected poles	: 3 or 4
Rated operational voltage (Ue)	: 380 / 400 / 415 Vac, 690 Vac
Rated insulation voltage (Ui)	: 1000 V for main circuit 500 V for control circuit 400 V for auxiliary circuit
Rated impulse withstand voltage (Uimp)	: 12 kV for main circuit 6 kV for control circuit and auxiliary circuit
Rated frequency	: 50 / 60 Hz
Rated current (In)	: 4000 A, 3600 A, 3200 A, 2900 A, 2500 A, 2000 A, 1600 A, 1250 A, 1000 A
Conventional thermal current (Ith)	: Equal to In
Current rating for four-pole circuit-breakers	: Equal to In
Rated service short-circuit breaking capacity (Ics)	: 100% Icu
Rated ultimate short-circuit breaking capacity (Icu)	: 100 kA at 380 / 400 / 415 Vac, 85 kA at 690 Vac
Rated short-time withstand current (Icw)	: 100% Icu / 1 s at 380 / 400 / 415 Vac, 100% Icu / 1 s at 690 Vac 75 kA / 3 s at 380 / 400 / 415 / 690 Vac
Suitable for isolation	: Suitable
Selectivity category	: B
Safety distance (screen-circuit breaker)	: Left / Right: 0 mm Up / Down: 0 mm Front / Back: 0 mm
Reference temperature	: Independent
Method of mounting	: Fixed or Withdrawable
EMC environment	: A
Tightening torque for terminals	: 45 Nm for M10
Line/load terminal	: Immaterial
Connection	: Copper busbar For In = 1000 - 2900 A, cross-sectional area of conductor (mm <sup>2</sup> ): (60 x 5) mm <sup>2</sup> x 2 - (100 x 10) mm <sup>2</sup> x 3 For In = 3200 A, cross-sectional area of conductor (mm <sup>2</sup> ): (100 x 10) mm <sup>2</sup> x 4 For In = 3600 - 4000 A, cross-sectional area of conductor (mm <sup>2</sup> ): (100 x 10) mm <sup>2</sup> x 5
Electronic trip unit type(s)	: multi function type, standard I type, standard II type and advanced type
Inverse time delay release	: Ir (inverse time delay tripping setting): For trip unit of standard II type: (0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 1) x In For trip unit of advanced type: (0,4 - 1) x In, in steps of 1 A For trip units of multi function type and standard I type: (0,4 - 1) x In, in steps of 1 A



Time setting of the inverse time delay release	: $t_r$ (inverse time delay tripping setting): For trip units of standard II type and advanced type: 1 s / 2 s / 4 s / 8 s / 12 s / 16 s / 20 s / 30 s with tolerance of $\pm 10\%$ (at 6 $I_r$ ) For trip units of multi function type and standard I type: 1 s / 2 s / 4 s / 8 s / 12 s / 16 s / 20 s / 24 s / 30 s with tolerance of $\pm 15\%$ (at 6 $I_r$ ) 2 $I_r$ tripping time declared by the manufacturer: For trip units of standard II type and advanced type: when $t_r = 1$ s: 8,1 s - 9,9 s when $t_r = 30$ s: 243 s - 297 s For trip units of multi function type and standard I type: when $t_r = 1$ s: 7,65 s - 10,35 s when $t_r = 30$ s: 229,5 s - 310,5 s
Short time delay release	: $I_{sd}$ (short time delay tripping setting): For trip unit of standard II type: (1,5 / 2 / 3 / 4 / 6 / 8 / 10) $\times I_r$ For trip unit of advanced type: (1,5 - 10) $\times I_r$ , in steps of 1 A For trip units of multi function type and standard I type: (1,5 - 10) $\times I_r$ , in steps of 1 A if $I_{sd} < 10$ kA, in steps of 0,01 kA if $I_{sd} \geq 10$ kA
Time setting of the short time delay release	: $t_{sd}$ (short time delay tripping setting): $I_{2t}$ off: 0,1 s / 0,2 s / 0,3 s / 0,4 s 0,1 s, with tolerance of 60 ms - 140 ms 0,2 s, with tolerance of 160 ms - 240 ms 0,3 s, with tolerance of 255 ms - 345 ms 0,4 s, with tolerance of 340 ms - 460 ms
Instantaneous release	: $I_i$ (instantaneous tripping setting): For trip unit of standard II type: Max 50 kA (2 / 4 / 6 / 8 / 10 / 12 / 15) $\times I_n$ For trip unit of advanced type: Max 50 kA (2 - 15) $\times I_n$ , in steps of 1 A For trip units of multi function type and standard I type: (2 - 15) $\times I_n$ , in steps of 1 A if $I_i < 10$ kA, in steps of 0,01 kA if $I_i \geq 10$ kA
Making current release (MCR)	: For trip units of standard II type and advanced type: 40 kA For trip units of multi function type and standard I type: 32 kA
Ground fault release	: $I_g$ (ground fault release tripping setting): Max 1200 A For trip unit of standard II type: 500 A / 640 A / 800 A / 960 A / 1040 A / 1120 A / 1200 A For trip unit of advanced type: (500 A - 1200 A), in steps of 1 A For trip unit of multi function type and standard I type: (0,2 - 1) $\times I_n$ , in steps of 1 A, if $I_n < 2500$ A; (500 A - 1200 A), in steps of 1 A, if $I_n \geq 2500$ A
Time setting of the ground fault release	: $t_g$ (ground fault release tripping setting): $I_{2t}$ off: 0,1 s / 0,2 s / 0,3 s / 0,4 s 0,1 s, with tolerance of 60 ms - 140 ms 0,2 s, with tolerance of 160 ms - 240 ms 0,3 s, with tolerance of 255 ms - 345 ms 0,4 s, with tolerance of 340 ms - 460 ms
Shunt release	: 48 Vac / 48 - 60 Vdc, 100 - 130 Vac / Vdc, 200 - 250 Vac / Vdc, 380 - 440 Vac
Under-voltage release	: 48 Vac / 48 - 60 Vdc, 100 - 130 Vac / Vdc, 200 - 250 Vac / Vdc, 380 - 440 Vac
Closing coil	: 48 Vac / 48 - 60 Vdc, 100 - 130 Vac / Vdc, 200 - 250 Vac / Vdc, 380 - 440 Vac
Stored energy motor	: 220 / 230 Vac, 380 / 400 / 415 Vac, 110 / 220 Vdc

Power module for trip unit	:	220 - 230 Vac, 380 - 400 Vac, 110 Vdc, 220 Vdc
Auxiliary circuits	:	6NO6NC, 4NO4NC
		AC-15: 0,75 A at 400 Vac, 1,3 A at 230 Vac
		DC-13: 0,27 A at 220 Vdc, 0,55 A at 110 Vdc
		Ui: 400 V , Uimp: 6 kV, Ith: 6 A
		rated conditional short-circuit current: 1 kA
		SCPD: RL6-25/6, 6 A

## TESTS

### Test requirements

EN 60947-2:2017

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

EN 60947-5-1:2004

### Test result

The test results are laid down in DEKRA test file 331276600.

### Additional information

The referred test reports are 3312766.50, 3312766.51, 3305866.50 and 3301166.54.

This certificate replaces certificate No. 3305866.01 which we herewith declare invalid.

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

### Conclusion

The examination proved that all requirements were met.

### Factory location

NOARK Electrics (Shanghai) Co.,Ltd.  
No. 3857, Sixian Road, Songjiang District  
201614 Shanghai, China