

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

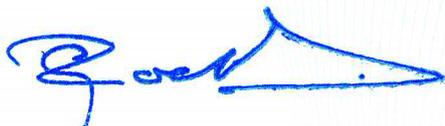
DEKRA hereby grants the right to use the KEMA-KEUR certification mark.

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

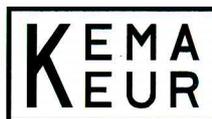


F.S. Strikwerda
Certification Manager

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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 Ui = 400 V, Uimp = 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 (Ith) | : | Equal to In |
| 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 | : | Ir (inverse time delay tripping setting) 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 |
| Time settings | : | Tr (inverse time delay tripping setting), 9 curves 1, 2, 4, 8, 12, 16, 20, 24, 30 (respectively tripping time at 6 Ir), with tolerance of $\pm 15\%$ for all curves: > 2 hours non-tripping at 1,05 IR < 2 hours tripping at 1,3 IR |
| Instantaneous release | : | Ii (instantaneous tripping setting) 2 In, 3 In, 4 In, 6 In, 8 In, 10 In, 12 In, 15 In, OFF |
| Time setting | : | Instantaneous |
| Short-time delay release | : | I _{sd} (short time delay tripping setting), 9 curves 1,5 Ir, 2 Ir, 2,5 Ir, 3 Ir, 4 Ir, 5 Ir, 6 Ir, 8 Ir, 10 Ir |
| Time setting | : | T _{sd} (short time delay tripping setting, 1 ² 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 $\pm 15\%$, X means OFF T _{sd} (inverse time delay tripping setting, 1 ² 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 Ir, the tripping time is equal to $(10 Ir)^2 \times Tsd / (I actual)^2$ with tolerance of $\pm 15\%$ |

| | | |
|------------------------|---|--|
| | | When the actual current is more than 10 I _r , the tripping time is equal to the value of setting with tolerance of ± 15% |
| Other releases | | |
| Ground fault release | : | <p>I_g (Ground fault release)</p> <p>Current setting I_g: 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_n > 1200 A</p> <p>0,2 I_n, 0,3 I_n, 0,4 I_n, 0,5 I_n, 0,6 I_n, 0,7 I_n, 0,8 I_n, 0,9 I_n, 1 I_n respectively when 400 A < I_n ≤ 1200 A</p> <p>0,3 I_n, 0,3 I_n, 0,4 I_n, 0,5 I_n, 0,6 I_n, 0,7 I_n, 0,8 I_n, 0,9 I_n, 1 I_n respectively when I_n ≤ 400 A</p> |
| Time settings | : | <p>T_g (short time delay tripping setting, I²t off condition), 4 curves 0,1 s, 0,2 s, 0,3 s, 0,4 s, X</p> <p>The tripping time is equal to the value of setting with tolerance of ± 15%, X means OFF</p> <p>T_g (inverse time delay tripping setting, I²t on condition), 4 special curves 0,1 s, 0,2 s, 0,3 s, 0,4 s</p> <p>When the actual current is between the current setting and I_n, the tripping time is equal to $[J^2 \times T_g / (I_{\text{actual}})^2]$ with tolerance of ± 15%</p> <p>When the actual current is equal or more than J, the tripping time is equal to the value of setting with tolerance of ± 15%</p> |
| Making current release | : | The value is equal to I _{sd} setting |
| Time settings | : | Instantaneous |

Product data - type NA8G-1600

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|---|---|--|
| Rated operational voltage (U _e) | : | 415 V, 690 V |
| Rated insulation voltage (U _i) | : | 690 Vac |
| Rated impulse withstand voltage (U _{imp}) | : | 8 kV |
| Rated current (I _n) | : | 200 A, 400 A, 630 A, 800 A, 1000 A, 1250 A, 1600 A |
| Rated operational current (I _e) | : | 0,4 I _n , 0,5 I _n , 0,6 I _n , 0,7 I _n , 0,8 I _n , 0,9 I _n , 0,95 I _n , 0,98 I _n , 1 I _n |
| Rated ultimate short-circuit breaking capacity (I _{cu}) | : | 50 kA at 415 V 25 kA at 690 V |
| Rated service short-circuit breaking capacity (I _{cs}) | : | 40 kA at 415 V 20 kA at 690 V |
| Rated short-time withstand current I _{cw} (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 _{cu} 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 Electrics Co., Ltd.

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

P.R. China