# 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) | : | NA8-1600H |

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 21 September 2018 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-105382

DEKRA Certification B.V.

drs. G.J. Zoetbrood
Managing Director

Susan Lehner
Certification Manager

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PRODUCTS RvA C 001

KEMA KEUR

## SPECIFICATION OF THE CERTIFIED PRODUCT

### Product data

| | | |
|---|---|---|
| Product | : | Air Circuit-Breaker |
| Trade name(s) | : | CHINT |
| Type(s)/model(s) | : | NA8-1600H |
| 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<br>500 V for control circuit and auxiliary circuit |
| Rated impulse withstand voltage (Uimp) | : | 12 kV for main circuit<br>6 kV for control circuit and auxiliary circuit |
| Rated frequency | : | 50 / 60 Hz |
| Rated current (In) | : | 1600 A, 1250 A, 1000 A, 800 A, 630 A, 400 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) | : | 55 kA at 380 / 400 / 415 Vac,<br>36 kA at 690 Vac |
| Rated ultimate short-circuit breaking capacity (Icu) | : | 65 kA at 380 / 400 / 415 Vac,<br>36 kA at 690 Vac |
| Rated short-time withstand current (Icw) | : | 42 kA / 1 s at 380 / 400 / 415 Vac,<br>36 kA / 1 s at 690 Vac<br>30 kA / 3 s at 380 / 400 / 415 / 690 Vac |
| Individual pole short-circuit (IIT) | : | Yes, 12 In at 380 / 400 / 415 Vac |
| Suitable for isolation | : | Suitable |
| Selectivity category | : | B |
| Safety distance (screen-circuit breaker) | : | Left / Right: 0 mm<br>Up / Down: 0 mm<br>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 | : | Minimum cross-sectional area of conductor:<br>240 mm², prepared copper conductor with cable lug<br>Maximum cross-sectional area of conductor:<br>(100 x 5) mm² x 2, copper busbar |
| Electronic trip unit type(s) | : | standard type and advanced type |
| Inverse time delay release | : | Ir (inverse time delay tripping setting):<br>(0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 1) x In for trip unit of standard type<br>(0,4 - 1) x In, in steps of 1 A for trip unit of advanced type |
| Time setting of the inverse time delay release | : | tr (inverse time delay tripping setting):<br>1 s / 2 s / 4 s / 8 s / 12 s / 16 s / 20 s / 30 s<br>with tolerance of ± 10% (at 6 Ir)<br>2Ir tripping time declared by the manufacturer:<br>when tr = 1 s: 8,1 s - 9,9 s<br>when tr = 30 s: 243 s - 297 s |
| Short time delay release | : | Isd (short time delay tripping setting):<br>(1,5 / 2 / 3 / 4 / 6 / 8 / 10) x Ir for trip unit of standard type<br>(1,5 - 10) x Ir, in steps of 1 A for trip unit of advanced type |

| | | |
|---|---|---|
| Time setting of the short time delay release | : | tsd (short time delay tripping setting):<br>I2t off: 0,1 s / 0,2 s / 0,3 s / 0,4 s<br>0,1 s, with tolerance of 60 ms - 140 ms<br>0,2 s, with tolerance of 160 ms - 240 ms<br>0,3 s, with tolerance of 255 ms - 345 ms<br>0,4 s, with tolerance of 340 ms - 460 ms |
| Instantaneous release | : | Ii (instantaneous tripping setting):<br>(2 / 4 / 6 / 8 / 10 / 12 / 15) x In for trip unit of standard type<br>(2 - 15) x In, in steps of 1 A for trip unit of advanced type |
| Making current release (MCR) | : | 16 kA |
| Ground fault release | : | Ig (ground fault release tripping setting): Max 1200 A<br>(0,2 / 0,3 / 0,4 / 0,5 / 0,6 / 0,8 / 1) x In for trip unit of standard type<br>(0,2 - 1) x In, in steps of 1 A for trip unit of advanced type |
| Time setting of the ground fault release | : | tg (ground fault release tripping setting):<br>I2t off: 0,1 s / 0,2 s / 0,3 s / 0,4 s<br>0,1 s, with tolerance of 60 ms - 140 ms<br>0,2 s, with tolerance of 160 ms - 240 ms<br>0,3 s, with tolerance of 255 ms - 345 ms<br>0,4 s, with tolerance of 340 ms - 460 ms |
| Shunt release | : | 48 Vac / 48 - 60 Vdc, 100 - 130 Vac / Vdc,<br>200 - 250 Vac / Vdc, 380 - 440 Vac |
| Under-voltage release | : | 48 Vac / 48 - 60 Vdc, 100 - 130 Vac / Vdc,<br>200 - 250 Vac / Vdc, 380 - 440 Vac |
| Closing coil | : | 48 Vac / 48 - 60 Vdc, 100 - 130 Vac / Vdc,<br>200 - 250 Vac / Vdc, 380 - 440 Vac |
| Stored energy motor | : | 220 / 230 Vac, 380 / 400 / 415 Vac,<br>110 / 220 Vdc |
| Power module for trip unit | : | 110 Vdc, 220 Vdc |
| Auxiliary circuits | : | 6NO6NC, 4NO4NC<br>AC-15: 2 A at 415 / 240 Vac,<br>DC-13: 0,25 A at 220 / 110 Vdc<br>Ui: 500 V , Uimp: 6 kV, Ith: 6 A<br>rated conditional short-circuit current: 1 kA<br>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 331266800.

### Additional information
The referred test reports are 3312668.50 and 3312668.51.

The product also complies with IEC 60947-2:2016; IEC 60947-5-1:2016.

### Conclusion
The examination proved that all requirements were met.

**Factory location**
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201614 Shanghai, China