

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 : Moulded-case circuit-breaker
Trade name(s) : CHINT
Type(s)/model(s) : NM8N-400C, NM8N-400H, NM8N-400Q, NM8N-400R, NM8N-400S,
NM8N-630C, NM8N-630H, NM8N-630Q, NM8N-630R and NM8N-630S

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 and EN 60947-5-1:2017
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 2032236

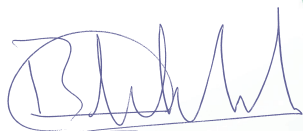
DEKRA hereby grants the right to use the KEMA-KEUR certification mark.

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 14 October 2019 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-110653

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



M. Triulzi
Certification Manager

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DUTCH ACCREDITATION
COUNCIL



SPECIFICATION OF THE CERTIFIED PRODUCT

Product data

Product	: Moulded-case circuit-breaker
Trade name(s)	: CHINT
Type(s)/model(s)	: NM8N-400C, NM8N-400H, NM8N-400Q, NM8N-400R, NM8N-400S, NM8N-630C, NM8N-630H, NM8N-630Q, NM8N-630R and NM8N-630S
Number of poles	: 3P and 4P
Protected poles	: 3 or 4
Rated operational voltage (Ue)	: 380 Vac / 400 Vac / 415 Vac, 440 Vac, 500 Vac, 660 Vac / 690 Vac
Rated insulation voltage (Ui)	: 1000 V for main circuit 500 V for control circuit 500 V for auxiliary circuit
Rated impulse withstand voltage (Uimp)	: 12 kV for main circuit 2,5 kV for shunt release and undervoltage release 6,0 kV for electric operating mechanism 2,5 kV for auxiliary circuit
Rated frequency	: 50 / 60 Hz
Conventional thermal current (Ith)	: Equal to In
Suitable for isolation	: Suitable
Current rating for four-pole circuit-breakers	: 0,5 In, 1,0In, OFF
Rated short-time withstand current (Icw)	: $I_n \leq 400$ A: 5 kA - 1 s, $I_n > 400$ A, 8 kA - 1 s
Individual pole short-circuit (IIT)	: 1,2 Isd at 440 Vac for electronic trip unit EN and EM
Selectivity category	: B
Safety distance (screen-circuit breaker)	: Front / back: 0 mm Left / right: 0 mm Up / down: 0 mm
Reference temperature	: Independent
Method of mounting	: plug-in or fixed or withdrawable
EMC Environment	: A
Tightening torque for terminals	: 25,0 Nm for M10
Line/load terminal	: Immaterial
Connection	: copper conductor with cable lug
Inverse time delay release	: Ir (inverse time delay tripping setting): For trip unit: EN: (0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 0,95 / 1) x In For trip unit: ENM: (0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 1) x In For trip unit: EM and EMM: (0,4 - 1) x In, in steps of 1 A

Time setting of the inverse time delay release	: tr (inverse time delay tripping setting): For trip unit: EN: 3 / 6 / 12 / 18 s, with tolerance of $\pm 10\%$ (at 6 Ir) For trip unit: EM: 3 s - 18 s, with tolerance of $\pm 10\%$ (at 6 Ir) in steps of 1 s, For trip unit: ENM and EMM: 4 / 8 / 16 / 24 s, with tolerance of $\pm 10\%$ (at 7,2 Ir) 2 Ir tripping time declared by the manufacturer: For trip unit: EN and EM: when tr = 3 s: 24,3 s - 29,7 s when tr = 18 s: 145,8 s - 178,2 s For trip unit: ENM and EMM: when tr = 4 s: 46,66 s - 57,0 s when tr = 24 s: 279,9 s - 342,14 s
Short time delay release	: Isd (short time delay current setting): For trip unit: EN: (1,5 / 2,0 / 3,0 / 4,0 / 6,0 / 8,0 / 10) x Ir, OFF For trip unit: ENM: (5,0 / 6,0 / 8,0 / 9,0 / 10 / 11 / 12) x Ir, OFF For trip unit: EM: (1,5 - 10) x Ir, OFF, in steps of 1 A, For trip unit: EMM: (4,0 - 12) x Ir, OFF, in steps of 1 A,
Time setting of the short time delay release	: tsd (short time delay time setting): For trip unit: EN: I ² t 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 240 ms - 360 ms 0,4 s, with tolerance of 320 ms - 480 ms For trip unit: EM: in steps of 0,1 s, I ² t 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 240 ms - 360 ms 0,4 s, with tolerance of 320 ms - 480 ms For trip unit: ENM and EMM: I ² t off: 0,1 s 0,1 s, with tolerance of 60 ms - 140 ms non-tripping duration stated by the manufacturer: For trip unit: EN and EM: 0,1 s: 60 ms 0,2 s: 160 ms 0,3 s: 240 ms 0,4 s: 320 ms For trip unit: ENM and EMM: 0,1 s: 60 ms

Instantaneous release	: I _i (instantaneous current setting): For trip unit: EN: (2,0 / 3,0 / 4,0 / 6,0 / 8,0 / 10 / 12) x I _n , OFF For trip unit: ENM: 15 x I _n , For trip unit: EM: (1,5 - 12) x I _n , OFF, in steps of 1 A, For trip unit: EMM: 15 x I _n
Ground fault release	: I _g (Ground fault release) Current setting I _g : For trip unit: EM and EMM: I _g : (0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 1,0) x I _n , OFF, t _g (time setting): I ² t 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 240 ms - 360 ms 0,4 s, with tolerance of 320 ms - 480 ms
Shunt release	: SHT22-M8: AC: 48 V, 110 V, 220 - 240 V, 380 - 415 V, 50 / 60 Hz DC: 24 V, 48 V, 110 - 120 V, 220 V
Under-voltage release	: UVT22-M8: AC: 48 V, 110 V, 220 - 240 V, 380 - 415 V, 50 / 60 Hz DC: 24 V, 48 V, 110 - 120 V, 220 V
Electric operating mechanism	: MOD23-M8: AC: 110 V, 220 - 240 V, 380 - 415 V, 50 / 60 Hz DC: 24 V, 110 V, 220 V
Auxiliary circuits	: AX21-M8 / AL21-M8 1 NO and 1 NC AC-15: 2 A at 415 Vac, 4 A at 240 Vac, 5 A at 110 Vac DC-13: 0,25 A at 220 Vdc / 110 Vdc U _i : 500 V, U _{imp} : 2,5 kV Rated conditional short-circuit current: 1 kA Fuse: RL6-25/6, 6 A, 500 Vac, 50 kA, Schneider

Product data – type NM8N-400C

Rated current (I _n)	: 250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (I _{cu})	: 36 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 25 kA at 500 Vac, 10 kA at 660 Vac / 690 Vac,
Rated service short-circuit breaking capacity (I _{cs})	: 36 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 25 kA at 500 Vac, 10 kA at 660 Vac / 690 Vac,

Product data – type NM8N-400H

Rated current (I _n)	: 250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (I _{cu})	: 100 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 50 kA at 500 Vac, 15 kA at 660 Vac / 690 Vac,
Rated service short-circuit breaking capacity (I _{cs})	: 100 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 50 kA at 500 Vac, 15 kA at 660 Vac / 690 Vac,

Product data – type NM8N-400Q

Rated current (In)	: 250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (Icu)	: 70 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 40 kA at 500 Vac, 12 kA at 660 Vac / 690 Vac,
Rated service short-circuit breaking capacity (Ics)	: 70 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 40 kA at 500 Vac, 12 kA at 660 Vac / 690 Vac,

Product data – type NM8N-400R

Rated current (In)	: 250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (Icu)	: 150 kA at 380 Vac / 400 Vac / 415 Vac 100 kA at 440 Vac, 50 kA at 500 Vac, 15 kA at 660 Vac / 690 Vac
Rated service short-circuit breaking capacity (Ics)	: 150 kA at 380 Vac / 400 Vac / 415 Vac 100 kA at 440 Vac, 50 kA at 500 Vac, 15 kA at 660 Vac / 690 Vac

Product data – type NM8N-400S

Rated current (In)	: 250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (Icu)	: 50 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 40 kA at 500 Vac, 12 kA at 660 Vac / 690 Vac,
Rated service short-circuit breaking capacity (Ics)	: 50 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 40 kA at 500 Vac, 12 kA at 660 Vac / 690 Vac,

Product data – type NM8N-630C

Rated current (In)	: 250 A, 315 A, 350 A, 400 A, 500 A, 630 A
Rated ultimate short-circuit breaking capacity (Icu)	: 36 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 25 kA at 500 Vac, 10 kA at 660 Vac / 690 Vac,
Rated service short-circuit breaking capacity (Ics)	: 36 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 25 kA at 500 Vac, 10 kA at 660 Vac / 690 Vac,

Product data – type NM8N-630H

Rated current (In)	: 250 A, 315 A, 350 A, 400 A, 500 A, 630 A
Rated ultimate short-circuit breaking capacity (Icu)	: 100 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 50 kA at 500 Vac, 15 kA at 660 Vac / 690 Vac,
Rated service short-circuit breaking capacity (Ics)	: 100 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 50 kA at 500 Vac, 15 kA at 660 Vac / 690 Vac,

Product data – type NM8N-630Q

Rated current (In)	: 250 A, 315 A, 350 A, 400 A, 500 A, 630 A
Rated ultimate short-circuit breaking capacity (Icu)	: 70 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 40 kA at 500 Vac, 12 kA at 660 Vac / 690 Vac,

Rated service short-circuit breaking capacity (Ics) : 70 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac,
40 kA at 500 Vac,
12 kA at 660 Vac / 690 Vac,

Product data – type NM8N-630R

Rated current (In) : 250 A, 315 A, 350 A, 400 A, 500 A, 630 A
Rated ultimate short-circuit breaking capacity (Icu) : 150 kA at 380 Vac / 400 Vac / 415 Vac
100 kA at 440 Vac,
50 kA at 500 Vac,
15 kA at 660 Vac / 690 Vac
Rated service short-circuit breaking capacity (Ics) : 150 kA at 380 Vac / 400 Vac / 415 Vac
100 kA at 440 Vac,
50 kA at 500 Vac,
15 kA at 660 Vac / 690 Vac

Product data – type NM8N-630S

Rated current (In) : 250 A, 315 A, 350 A, 400 A, 500 A, 630 A
Rated ultimate short-circuit breaking capacity (Icu) : 50 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac,
40 kA at 500 Vac,
12 kA at 660 Vac / 690 Vac,
Rated service short-circuit breaking capacity (Ics) : 50 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac,
40 kA at 500 Vac,
12 kA at 660 Vac / 690 Vac,

TESTS**Test requirements**

EN 60947-2:2017

EN 60947-5-1:2017

Test result

The test results are laid down in DEKRA test file 331535200.

Additional information

Nomenclature breakdown:

NM8N – 630 C TM 630 4

a b c d e f

a = model name: 'NM8N'

b = frame size: '630' or '400'

c = short-circuit capacity: 'C', 'S', 'Q', 'H' or 'R'

d = trip unit: 'EN', 'EM', 'ENM', 'EMM'

e = rated current: 250 A, 315 A, 350 A, 400 A, 500 A, 630 A

f = number of poles: '4' means 4P, '3' means 3P

The referred test reports are 3315352.50, CQC test report no. 00901-CB2018CQC-084130 issued on 2019-03-25 and CQC test report no. 00901-CB2018CQC-084130-M1 issued on 2019-06-06.

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

This certificate replaces certificate No. 33-110404 which we herewith declare invalid.

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

Accessory type	Model
Auxiliary circuit	AX21-M8 / AL21-M8
Shunt release	SHT22-M8
Undervoltage release	UVT22-M8
Stored energy motors	MOD23-M8
Rotation handle	DRH23-M8
Plug-in base	PIA23-M8
Withdrawable base	DOB23-M8