

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 : Circuit-breaks incorporating residual current protection
Trade name(s) : CHINT
Type(s)/model(s) : NM8NL-400C, NM8NL-400H, NM8NL-400Q, NM8NL-400R, NM8NL-400S,
NM8NL-630C, NM8NL-630H, NM8NL-630Q, NM8NL-630R and NM8NL-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

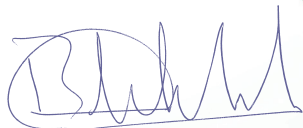
DEKRA hereby grants the right to use the KEMA-KEUR certification mark.

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

Certificate number: 33-110474

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



JMg Marggraf
Certification Manager

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DUTCH ACCREDITATION
COUNCIL



SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

Product	: Circuit-breaks incorporating residual current protection
Trade name(s)	: CHINT
Type(s)/model(s)	: NM8NL-400C, NM8NL-400H, NM8NL-400Q, NM8NL-400R, NM8NL-400S, NM8NL-630C, NM8NL-630H, NM8NL-630Q, NM8NL-630R and NM8NL-630S
Number of poles	: 3P and 4P (N pole with or without overcurrent protection)
Protected poles	: 3 or 4
Rated operational voltage (Ue)	: 380 Vac / 400 Vac / 415 Vac, 440 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 kV for electric operating mechanism 2,5 kV for auxiliary circuit
Rated frequency	: 50 / 60 Hz
Conventional thermal current (Ith)	: Equal to In
Current rating for four-pole circuit-breakers	: Equal to In
Individual pole short-circuit (IIT)	: 1,2 Ii at 440 Vac
Suitable for isolation	: Suitable
Selectivity category	: A
Safety distance (screen-circuit breaker)	: Front / back: 0 mm Left / right: 0 mm Up / down: 0 mm
Reference temperature	: 40 °C
Method of mounting	: fixed
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 thermal magnetic type: Ir: (0,7 / 0,8 / 0,9 / 1) x In
Time setting of the inverse time delay release	: Fixed, trip time at 2 In: 60 s ≤ t ≤ 600 s
Instantaneous release	: Ii (instantaneous tripping setting): For thermal magnetic type: Ii: (5 / 6 / 7 / 8 / 9 / 10) x In For electromagnetic type: Ii: (9 / 10 / 11 / 12 / 13 / 14) x In
Rated residual operating current (IΔn)	: For non-time-delay type: Current setting: Adjustable with fixed steps: RCD1: 30 mA / 100 mA / 300 mA / 1000 mA, RCD3: 50 mA / 200 mA / 500 mA / 1000 mA RCD4: 100 mA / 300 mA / 1000 mA / 2000 mA For time-delay type: Current setting: Adjustable with fixed steps: RCD1: 100 mA / 300 mA / 1000 mA, RCD3: 50 mA / 200 mA / 500 mA / 1000 mA RCD4: 100 mA / 300 mA / 1000 mA / 2000 mA
Time setting of rated residual operating current	: Non-time-delay or adjustable time-delay: 0,3 s / 0,5 s / 1,0 s

The limiting non-actuating time at $2I\Delta n$ (Δt)	: 0,06 s / 0,2 s / 0,5 s
Classification according to behaviour in presence of a d.c. component	: Type A or Type AC
Dependent of line voltage	: Yes
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 Ui: 500 V, Uimp: 2,5 kV Rated conditional short-circuit current: 1 kA Fuse: RL6-25/6, 6 A, 500 Vac, 50 kA, Schneider

Product data – type NM8NL-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
Rated service short-circuit breaking capacity (I_{cs})	: 36 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Residual short-circuit making and breaking capacity ($I\Delta m$)	: 9 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac

Product data – type NM8NL-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
Rated service short-circuit breaking capacity (I_{cs})	: 100 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Residual short-circuit making and breaking capacity ($I\Delta m$)	: 25 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac

Product data – type NM8NL-400Q

Rated current (I_n)	: 250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (I_{cu})	: 70 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Rated service short-circuit breaking capacity (I_{cs})	: 70 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Residual short-circuit making and breaking capacity ($I\Delta m$)	: 17,5 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac

Product data – type NM8NL-400R

Rated current (I_n)	: 250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (I_{cu})	: 150 kA at 380 Vac / 400 Vac / 415 Vac, 100 kA at 440 Vac

Rated service short-circuit breaking capacity (Ics) : 150 kA at 380 Vac / 400 Vac / 415 Vac,
100 kA at 440 Vac
Residual short-circuit making and breaking capacity (IΔm) : 37,5 kA at 380 Vac / 400 Vac / 415 Vac,
25 kA at 440 Vac,

Product data – type NM8NL-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
Rated service short-circuit breaking capacity (Ics) : 50 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Residual short-circuit making and breaking capacity (IΔm) : 12,5 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac

Product data – type NM8NL-630C

Rated current (In) : 250 A, 315 A, 350 A, 400 A, 500 A
Rated service short-circuit breaking capacity (Ics) : 36 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Rated service short-circuit breaking capacity (Ics) : 36 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Residual short-circuit making and breaking capacity (IΔm) : 9 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac

Product data – type NM8NL-630H

Rated current (In) : 250 A, 315 A, 350 A, 400 A, 500 A
Rated ultimate short-circuit breaking capacity (Icu) : 100 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Rated service short-circuit breaking capacity (Ics) : 100 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Residual short-circuit making and breaking capacity (IΔm) : 25 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac

Product data – type NM8NL-630Q

Rated current (In) : 250 A, 315 A, 350 A, 400 A, 500 A
Rated ultimate short-circuit breaking capacity (Icu) : 70 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Rated service short-circuit breaking capacity (Ics) : 70 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Residual short-circuit making and breaking capacity (IΔm) : 17,5 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac

Product data – type NM8NL-630R

Rated current (In) : 250 A, 315 A, 350 A, 400 A, 500 A
Rated ultimate short-circuit breaking capacity (Icu) : 150 kA at 380 Vac / 400 Vac / 415 Vac,
100 kA at 440 Vac
Rated service short-circuit breaking capacity (Ics) : 150 kA at 380 Vac / 400 Vac / 415 Vac,
100 kA at 440 Vac
Residual short-circuit making and breaking capacity (IΔm) : 37,5 kA at 380 Vac / 400 Vac / 415 Vac,
25 kA at 440 Vac,

Product data – type NM8NL-630S

Rated current (In) : 250 A, 315 A, 350 A, 400 A, 500 A

Rated ultimate short-circuit breaking capacity (I_{cu}) : 50 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Rated service short-circuit breaking capacity (I_{cs}) : 50 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac
Residual short-circuit making and breaking capacity (I Δ m) : 12,5 kA at 380 Vac / 400 Vac / 415 Vac / 440 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 331535400.

Additional information

Nomenclature breakdown:

NM8N L – 630 C TM 500 4

a b c d e f g

a = model name: 'NM8N'

b = residual current protection device

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

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

e = trip unit: 'M' means electromagnetic type (ICB) or 'TM' means thermal magnetic type

f = rated current: 250 A, 315 A, 350 A, 400 A, 500 A

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

The referred test reports are 3315354.50, 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.

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
Electric operating mechanism	MOD23-M8
Rotation handle	DRH23-M8