

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-250C, NM8NL-250H, NM8NL-250Q, NM8NL-250R and NM8NL-250S

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(s) IEC 60947-2:2016, IEC 60947-2:2016/A1:2019, EN 60947-2:2017, EN 60947-2:2017/A1:2020, IEC 60947-5-1:2016 and EN 60947-5-1:2017
- an inspection of the factory location according to CENELEC Operational Document CIG 021
- a DEKRA certification agreement with the number 2032236

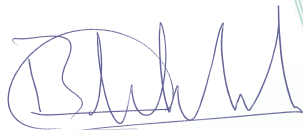
DEKRA hereby grants the right to use the KEMA-KEUR certification mark.

The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration and under the conditions of the KEMA-KEUR certification agreement.

This certificate is issued on 1 April 2022 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-121554

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



R Zhou
Certification Manager

© Integral publication of this certificate is allowed

ACCREDITED BY THE
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-250C, NM8NL-250H, NM8NL-250Q, NM8NL-250R and NM8NL-250S
Number of poles	: 3P and 4P
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)	: 8 kV for main circuit 2,5 kV for shunt release and under-voltage release 6 kV for electric operating mechanism 2,5 kV for auxiliary circuit
Rated frequency	: 50 / 60 Hz
Rated current (In)	: 125 A, 160 A, 180 A, 200 A, 225 A, 250 A
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	: 11 Nm for M8
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 In: 180 A - 250 A Ii: (7 / 8 / 9 / 10 / 11 / 12) x In for In: 125 A - 160 A 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, RCD2: 50 mA / 200 mA / 500 mA / 2000 mA For time-delay type: Current setting: Adjustable with fixed steps: RCD1: 100 mA / 300 mA / 1000 mA, RCD2: 50 mA / 200 mA / 500 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	: MOD22-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-250C

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-250H

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-250Q

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-250R

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 (I_{cs})	: 150 kA at 380 Vac / 400 Vac / 415 Vac, 100 kA at 440 Vac
Residual short-circuit making and breaking capacity ($I\Delta m$)	: 37,5 kA at 380 Vac / 400 Vac / 415 Vac, 25 kA at 440 Vac,

Product data – type NM8NL-250S

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

TESTS**Test requirements**

IEC 60947-2:2016
IEC 60947-2:2016/A1:2019
EN 60947-2:2017
EN 60947-2:2017/A1:2020
IEC 60947-5-1:2016
EN 60947-5-1:2017

Test result

The test results are laid down in DEKRA test file 332143700.

Additional information

Nomenclature breakdown:

NM8N L – 250 C TM 250 4

a b c d e f g

a = model name: 'NM8N'

b = residual current protection device

c = frame size: '250'

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: 125 A, 160 A, 180 A, 200 A, 225 A, 250 A

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

The referred test reports are 3321437.50, 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.

This certificate replaces certificate No. 33-110451 which we hereby 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
Electric operating mechanism	MOD22-M8
Rotation handle	DRH22-M8