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-250C, NM8N-250H, NM8N-250Q, NM8N-250R and NM8N-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 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 10 October 2019 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-110292

DEKRA Certification B.V.

B.T.M. Holtus
Managing Director

JMg Marggraf
Certification Manager

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PRODUCTS RvA C 001

KEMA KEUR

SPECIFICATION OF THE CERTIFIED PRODUCT

Product data

Product	:	Moulded-case circuit-breaker
Trade name(s)	:	CHINT
Type(s)/model(s)	:	NM8N-250C, NM8N-250H, NM8N-250Q, NM8N-250R and NM8N-250S
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)	:	8 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
Rated current (In)	:	32 A, 40 A, 50 A, 63 A, 80 A, 100 A, 125 A, 160 A, 180 A, 200 A, 225 A, 250 A
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)	:	In ≤ 63 A: 1 kA - 1 s, 63 A < In ≤ 160 A: 2 kA - 1 s, In ≥ 180 A, 3 kA - 1 s
Individual pole short-circuit (IIT)	:	1,2 Isd at 690 Vac for electronic trip unit EN and EM
Selectivity category	:	A
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
EMC Environment	:	A
Tightening torque for terminals	:	11,0 Nm for M8
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 ± 10% (at 6 Ir) For trip unit: EM: 3 s - 18 s, with tolerance of ± 10% (at 6 Ir) in steps of 1 s, For trip unit: ENM and EMM: 4 / 8 / 16 s, with tolerance of ± 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 = 16 s: 186,6 s - 228,1 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^2t 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^2t 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^2t 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	:	Ii (instantaneous current setting): For trip unit: EN: (2,0 / 3,0 / 4,0 / 6,0 / 8,0 / 10 / 12) x In, OFF For trip unit: ENM: 15 x In, For trip unit: EM: (1,5 - 12) x In, OFF, in steps of 1 A, For trip unit: EMM: 15 x In
Ground fault release	:	Ig (Ground fault release) Current setting Ig: For trip unit: EM and EMM: Ig: (0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 1,0) x In, OFF, tg (time setting): I²t 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
Cshunt 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 NM8N-250C

Rated ultimate short-circuit breaking capacity (Icu)	:	36 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 25 kA at 500 Vac, 6 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, 6 kA at 660 Vac / 690 Vac,

Product data – type NM8N-250H

Rated ultimate short-circuit breaking capacity (Icu)	:	100 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 50 kA at 500 Vac, 10 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, 10 kA at 660 Vac / 690 Vac,

Product data – type NM8N-250Q

Rated ultimate short-circuit breaking capacity (Icu)	:	70 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 40 kA at 500 Vac, 8 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, 8 kA at 660 Vac / 690 Vac,

Product data – type NM8N-250R

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, 10 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, 10 kA at 660 Vac / 690 Vac

Product data – type NM8N-250S

Rated ultimate short-circuit breaking capacity (Icu)	:	50 kA at 380 Vac / 400 Vac / 415 Vac / 440 Vac, 40 kA at 500 Vac, 8 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, 8 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 331534700.

Additional information
Nomenclature breakdown:

NM8N – 250 C EM 250 4
a b c d e f
a = model name: 'NM8N'
b = frame size: '250'
c = short-circuit capacity: 'C', 'S', 'Q', 'H' or 'R'
d = trip unit: 'EN', 'EM', 'ENM', 'EMM'
e = rated current: 32 A, 40 A, 50 A, 63 A, 80 A, 100 A, 125 A, 160 A, 180 A, 200 A, 225 A, 250 A
f = number of poles: '4' means 4P, '3' means 3P

The referred test reports are 3315347.50, 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	MOD22-M8
Rotation handle	DRH22-M8
Plug-in base	PIA22-M8