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)	:	NM8NDC-400B, NM8NDC-400C, NM8NDC-400H, NM8NDC-400Q, NM8NDC-400S, NM8NDC-630B, NM8NDC-630C, NM8NDC-630H, NM8NDC-630Q and NM8NDC-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(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: 33-121635

DEKRA Certification B.V.

B.T.M. Holtus
Managing Director

R Zhou
Certification Manager

ACCREDITED BY THE DUTCH ACCREDITATION COUNCIL

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)	:	NM8NDC-400B, NM8NDC-400C, NM8NDC-400H, NM8NDC-400Q, NM8NDC-400S, NM8NDC-630B, NM8NDC-630C, NM8NDC-630H, NM8NDC-630Q and NM8NDC-630S
Number of poles	:	3P and 4P
Rated operational voltage (Ue)	:	1000 Vdc for 4P, 750 Vdc for 3P,
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 under-voltage release 6 kV for electric operating mechanism 2,5 kV for auxiliary circuit
Conventional thermal current (Ith)	:	Equal to In
Suitable for photovoltaic (PV) systems	:	Suitable
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
Inverse time delay release	:	Ir (inverse time delay tripping setting): 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): Ii: (5 / 6 / 7 / 8 / 9 / 10) x In
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 NM8NDC-400B

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

Rated ultimate short-circuit breaking capacity (Icu)	:	25 kA at 1000 Vdc for 4P, 25 kA at 750 Vdc for 3P
Rated service short-circuit breaking capacity (Ics)	:	25 kA at 1000 Vdc for 4P, 25 kA at 750 Vdc for 3P

Product data – type NM8NDC-400C

Rated current (In)	:	250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (Icu)	:	36 kA at 1000 Vdc for 4P, 36 kA at 750 Vdc for 3P
Rated service short-circuit breaking capacity (Ics)	:	36 kA at 1000 Vdc for 4P, 36 kA at 750 Vdc for 3P

Product data – type NM8NDC-400H

Rated current (In)	:	250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (Icu)	:	100 kA at 1000 Vdc for 4P, 100 kA at 750 Vdc for 3P
Rated service short-circuit breaking capacity (Ics)	:	100 kA at 1000 Vdc for 4P, 100 kA at 750 Vdc for 3P

Product data – type NM8NDC-400Q

Rated current (In)	:	250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (Icu)	:	70 kA at 1000 Vdc for 4P, 70 kA at 750 Vdc for 3P
Rated service short-circuit breaking capacity (Ics)	:	70 kA at 1000 Vdc for 4P, 70 kA at 750 Vdc for 3P

Product data – type NM8NDC-400S

Rated current (In)	:	250 A, 315 A, 350 A, 400 A
Rated ultimate short-circuit breaking capacity (Icu)	:	50 kA at 1000 Vdc for 4P, 50 kA at 750 Vdc for 3P
Rated service short-circuit breaking capacity (Ics)	:	50 kA at 1000 Vdc for 4P, 50 kA at 750 Vdc for 3P

Product data – type NM8NDC-630B

Rated current (In)	:	250 A, 315 A, 350 A, 400 A, 500 A
Rated ultimate short-circuit breaking capacity (Icu)	:	25 kA at 1000 Vdc for 4P, 25 kA at 750 Vdc for 3P
Rated service short-circuit breaking capacity (Ics)	:	25 kA at 1000 Vdc for 4P, 25 kA at 750 Vdc for 3P

Product data – type NM8NDC-630C

Rated current (In)	:	250 A, 315 A, 350 A, 400 A, 500 A
Rated ultimate short-circuit breaking capacity (Icu)	:	36 kA at 1000 Vdc for 4P, 36 kA at 750 Vdc for 3P
Rated service short-circuit breaking capacity (Ics)	:	36 kA at 1000 Vdc for 4P, 36 kA at 750 Vdc for 3P

Product data – type NM8NDC-630H

Rated current (In)	:	250 A, 315 A, 350 A, 400 A, 500 A
Rated ultimate short-circuit breaking capacity (Icu)	:	100 kA at 1000 Vdc for 4P, 100 kA at 750 Vdc for 3P

Rated service short-circuit breaking capacity (Ics)	:	100 kA at 1000 Vdc for 4P, 100 kA at 750 Vdc for 3P

Product data – type NM8NDC-630Q

Rated current (In)	:	250 A, 315 A, 350 A, 400 A, 500 A
Rated ultimate short-circuit breaking capacity (Icu)	:	70 kA at 1000 Vdc for 4P, 70 kA at 750 Vdc for 3P
Rated service short-circuit breaking capacity (Ics)	:	70 kA at 1000 Vdc for 4P, 70 kA at 750 Vdc for 3P

Product data – type NM8NDC-630S

Rated current (In)	:	250 A, 315 A, 350 A, 400 A, 500 A
Rated ultimate short-circuit breaking capacity (Icu)	:	50 kA at 1000 Vdc for 4P, 50 kA at 750 Vdc for 3P
Rated service short-circuit breaking capacity (Ics)	:	50 kA at 1000 Vdc for 4P, 50 kA at 750 Vdc for 3P

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 332143100.

Additional information

Nomenclature breakdown:
NM8N DC – 630 C TM 500 4
a b c d e f g
a = model name: ‘NM8N’
b = direct current: ‘DC’
c = frame size: ‘630’ or ‘400’
d = short-circuit capacity: ‘B’, ‘C’, ‘S’, ‘Q’ or ‘H’
e = trip unit: ‘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 3321431.50, CQC CB test certificate CN46412-M1 issued on 2019-06-18 with CB test report no. 00901-CB2018CQC-084130-M1 issued on 2019-06-06 and CQC CB test certificate CN46412 issued on 2019-04-09 with CB test no. 00901-CB2018CQC-084130 issued on 2019-03-25.

This certificate replaces certificate No. 33-110471 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	MOD23-M8
Rotation handle	DRH23-M8