

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-250B, NM8NDC-250C, NM8NDC-250H, NM8NDC-250Q and
NM8NDC-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 31 March 2022 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-121517

DEKRA Certification B.V.



B.T.M. Holtus
Managing Director



F.S. Strikwerda
Certification Manager

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SPECIFICATION OF THE CERTIFIED PRODUCT

Product data

Product	: Moulded-case circuit-breaker
Trade name(s)	: CHINT
Type(s)/model(s)	: NM8NDC-250B, NM8NDC-250C, NM8NDC-250H, NM8NDC-250Q and NM8NDC-250S
Rated insulation voltage (Ui)	: 1000 V for main circuit 500 V for shunt release and under-voltage release for 2P, 3P and 4P 500 V for electric operating mechanism for 3P and 4P 500 V for auxiliary circuit for 2P, 3P and 4P
Rated impulse withstand voltage (Uimp)	: 8 kV for main circuit 2,5 kV for shunt release and under-voltage release for 2P, 3P and 4P 6 kV for electric operating mechanism for 3P and 4P 2,5 kV for auxiliary circuit for 2P, 3P and 4P
Rated current (In)	: 125 A, 160 A, 180 A, 200 A, 225 A, 250 A
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	: 11 Nm for M8
Line/load terminal	: Immaterial
Connection	: copper conductor with cable lug
Inverse time delay release	: For thermal magnetic type for 2P, 3P and 4P: I _r : (0,7 / 0,8 / 0,9 / 1,0) x I _n For thermal magnetic type for 1P: I _r : 1,0 x I _n
Time setting of the inverse time delay release	: Fixed, trip time at 2 I _n : 60 s ≤ t ≤ 600 s
Instantaneous release	: I _i (instantaneous tripping setting): For thermal magnetic type for 2P, 3P and 4P: I _i : (5 / 6 / 7 / 8 / 9 / 10) x I _n for I _n : 180 A - 250 A I _i : (7 / 8 / 9 / 10 / 11 / 12) x I _n for I _n : 125 A - 160 A For thermal magnetic type for 1P: I _i : 10 I _n
Shunt release	: SHT22-M8 for 2P, 3P and 4P: 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 for 2P, 3P and 4P: 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 for 3P and 4P 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 for 2P, 3P and 4P
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-250B

Number of poles : 1P, 2P, 3P and 4P
Rated operational voltage (Ue) : 1000 Vdc for 4P, 750 Vdc for 3P, 500 Vdc for 2P, 250 Vdc for 1P
Rated ultimate short-circuit breaking capacity (Icu) : 25 kA at 1000 Vdc for 4P,
25 kA at 750 Vdc for 3P,
25 kA at 500 Vdc for 2P,
25 kA at 250 Vdc for 1P
Rated service short-circuit breaking capacity (Ics) : 25 kA at 1000 Vdc for 4P,
25 kA at 750 Vdc for 3P,
25 kA at 500 Vdc for 2P,
25 kA at 250 Vdc for 1P

Product data – type NM8NDC-250C

Number of poles : 1P, 2P, 3P and 4P
Rated operational voltage (Ue) : 1000 Vdc for 4P, 750 Vdc for 3P, 500 Vdc for 2P, 250 Vdc for 1P
Rated ultimate short-circuit breaking capacity (Icu) : 36 kA at 1000 Vdc for 4P,
36 kA at 750 Vdc for 3P,
36 kA at 500 Vdc for 2P,
36 kA at 250 Vdc for 1P
Rated service short-circuit breaking capacity (Ics) : 36 kA at 1000 Vdc for 4P,
36 kA at 750 Vdc for 3P,
36 kA at 500 Vdc for 2P,
36 kA at 250 Vdc for 1P

Product data – type NM8NDC-250H

Number of poles : 2P, 3P and 4P
Rated operational voltage (Ue) : 1000 Vdc for 4P, 750 Vdc for 3P, 500 Vdc for 2P
Rated ultimate short-circuit breaking capacity (Icu) : 100 kA at 1000 Vdc for 4P,
100 kA at 750 Vdc for 3P,
100 kA at 500 Vac for 2P
Rated service short-circuit breaking capacity (Ics) : 100 kA at 1000 Vdc for 4P,
100 kA at 750 Vdc for 3P,
100 kA at 500 Vac for 2P

Product data – type NM8NDC-250Q

Number of poles : 2P, 3P and 4P
Rated operational voltage (Ue) : 1000 Vdc for 4P, 750 Vdc for 3P, 500 Vdc for 2P
Rated ultimate short-circuit breaking capacity (Icu) : 70 kA at 1000 Vdc for 4P,
70 kA at 750 Vdc for 3P,
70 kA at 500 Vdc for 2P
Rated service short-circuit breaking capacity (Ics) : 70 kA at 1000 Vdc for 4P,
70 kA at 750 Vdc for 3P,
70 kA at 500 Vdc for 2P

Product data – type NM8NDC-250S

Number of poles	: 1P, 2P, 3P and 4P
Rated operational voltage (Ue)	: 1000 Vdc for 4P, 750 Vdc for 3P, 500 Vdc for 2P, 250 Vdc for 1P
Rated ultimate short-circuit breaking capacity (Icu)	: 50 kA at 1000 Vdc for 4P, 50 kA at 750 Vdc for 3P, 50 kA at 500 Vdc for 2P, 50 kA at 250 Vdc for 1P
Rated service short-circuit breaking capacity (Ics)	: 50 kA at 1000 Vdc for 4P, 50 kA at 750 Vdc for 3P, 50 kA at 500 Vdc for 2P, 50 kA at 250 Vdc for 1P

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 332142500.

Additional information

Nomenclature breakdown:

NM8N DC – 250 B TM 250 4

a b c d e f g

a = model name: 'NM8N'

b = direct current: 'DC'

c = frame size: '250'

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

e = trip unit: '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, '2' means 2P, '1' means 1P

The referred test reports are 3321425.50, 3321425.51, 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. 33-116252 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 (2P, 3P and 4P)
Shunt release	SHT22-M8 (2P, 3P and 4P)
Undervoltage release	UVT22-M8 (2P, 3P and 4P)
Electric operating mechanism	MOD22-M8 (3P and 4P)
Rotation handle	DRH22-M8 (3P and 4P)