

ATTESTATION OF CONFORMITY

Issued to: NOARK Electrics (Shanghai) Co., Ltd.
No. 3857, Sixian Road, Songjiang District, 201614 Shanghai, China

For the product: Air Circuit-Breaker

Trade name: NOARK

Type/Model: Ex9A16-Q, Ex9A16

Ratings: Ue: 380 / 400 / 415 / 440 Vac, 525 / 660 / 690 Vac, 50 / 60 Hz,
In: 400 A, 630 A, 800 A, 1000 A, 1250 A, 1600 A
See annex for further ratings

Manufactured by: NOARK Electrics (Shanghai) Co., Ltd.
No. 3857, Sixian Road, Songjiang District, 201614 Shanghai, China

Subject: Type test

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

Remark: This attestation replaces no. 3322362.01A issued on 06 September 2022.

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in a test reports no. 3329558.50 issued on 2024-01-25, 3322362.50 issued on 2022-08-31, 3322362.51 issued on 2022-08-31.

This Attestation implies that the examined types are in accordance with the standards designated under the Low voltage directive (LVD) 2014/35/EU.

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

The CE marking may be affixed on the product if all relevant and effective EC directives are complied with.

Wenzhou, Zhejiang, 14 February 2024 Number: 3329558.01-AOC

DEKRA Testing Services (Zhejiang) Co., Ltd.

Ms J Guo
Certification Manager

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Ratings

Number of poles	: 3P and 4P
rated operational voltage (Ue)	: 380 / 400 / 415 / 440 Vac, 525 / 660 / 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)	: 12 kV for main circuit 6,0 kV for control circuit 6,0 kV for auxiliary circuit
Rated frequency	: 50 / 60 Hz
rated current (In)	: 400 A, 630 A, 800 A, 1000 A, 1250 A, 1600 A
Conventional thermal current (Ith)	: Equal to In
Current rating for four-pole circuit-breakers	: Equal to In
individual pole short-circuit (I _{IT})	: 12 In at 380 / 400 / 415 / 440 Vac Not applicable at 525 / 660 / 690 Vac
Suitable for isolation	: Suitable
Selectivity category	: B
Safety distance (screen-circuit breaker)	: Front / back: 0 mm Left / right: 0 mm Up / down: 0 mm
Reference temperature	: Independent
Method of mounting	: fixed or withdrawable
EMC Environment	: A
Tightening torque for terminals	: 45,0 Nm for M10
Line/load terminal Connection	: Immaterial Copper busbar or prepared copper conductor with cable lug Minimum cross-sectional area of conductor: 240 mm ² , prepared copper conductor with cable lug Maximum cross-sectional area of conductor: (100 mm x 5 mm) x 2 copper busbars
Inverse time delay release	: For Smart Unit M/A and Smart Unit P/H: I _r (inverse time delay tripping setting): (0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 0,95 / 0,98 / 1) x I _n For Smart Unit S: I _r (inverse time delay tripping setting): (0,4 - 1) x I _n , in step of 1A
Time setting of the inverse time delay release	: For Smart Unit M/A and Smart Unit P/H: t _r (inverse time delay tripping setting): 1 s / 2 s / 4 s / 8 s / 12 s / 16 s / 20 s / 24 s / 30 s, with tolerance of ± 10% (at 6 I _r) For Smart Unit S: 1 s - 30 s, with tolerance of ± 10% (at 6 I _r) in step of 1 s 2 I _r tripping time declared by the manufacturer: when t _r = 1 s: 8,1 s - 9,9 s when t _r = 30 s: 243 s - 297 s
short time delay release	: For Smart Unit M/A and Smart Unit P/H: I _{sd} (short time delay current setting): (1,5 / 2 / 2,5 / 3 / 4 / 5 / 6 / 8 / 10) x I _r For Smart Unit S: I _{sd} (short time delay current setting): (1,5 - 10) x I _r , in step of 1A
time setting of the short time delay release	: t _{sd} (short time delay time setting): I ² t 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 270 ms - 330 ms
		0,4 s, with tolerance of 360 ms - 440 ms
		non-tripping duration stated by the manufacturer:
		0,1 s: 50 ms
		0,2 s: 140 ms
		0,3 s: 250 ms
		0,4 s: 330 ms
Instantaneous release	:	For Smart Unit M/A and Smart Unit P/H: I _i (instantaneous current setting): (2 / 3 / 4 / 6 / 8 / 10 / 12 / 15) x I _n For Smart Unit S: I _i (instantaneous current setting): (2 - 15) x I _n , in step of 1A
Making current release (MCR)	:	16 kA
ground fault release	:	For Smart Unit M/A and Smart Unit P/H: For I _n : 1250 A, 1600 A I _g (current setting): 500 A / 640 A / 720 A / 800 A / 880 A / 960 A / 1040 A / 1120 A / 1200 A, For I _n : 400 A, 630 A, 800 A, 1000 A I _g (current setting): (0,2 / 0,3 / 0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 1,0) x I _n For Smart Unit S: For I _n : 1250 A, 1600 A I _g (current setting): 500 A / 640 A / 720 A / 800 A / 880 A / 960 A / 1040 A / 1120 A / 1200 A, For I _n : 630 A, 800 A, 1000 A, I _g (current setting): (0,2 - 1,0) x I _n , in step of 1A For I _n : 400 A, I _g (current setting): (0,3 - 1,0) x I _n , in step of 1A t _g (time setting): I _t off: 0,1 s / 0,2 s / 0,3 s / 0,4 s
Shunt release	:	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 270 ms - 330 ms 0,4 s, with tolerance of 360 ms - 440 ms 24 - 30 Vac, 48 Vac, 100 - 130 Vac, 200 - 250 Vac, 380 - 440 Vac, 50 / 60 Hz
Under-voltage release	:	24 - 30 Vdc, 48 - 60 Vdc, 100 - 130 Vdc, 200 - 250 Vdc, 380 - 440 Vac, 50 / 60 Hz
Closing coil	:	24 - 30 Vdc, 48 - 60 Vdc, 100 - 130 Vdc, 200 - 250 Vdc 24 - 30 Vac, 48 Vac, 100 - 130 Vac, 200 - 250 Vac, 380 - 440 Vac, 50 / 60 Hz
Stored energy motor	:	24 - 30 Vdc, 48 - 60 Vdc, 100 - 130 Vdc, 200 - 250 Vdc 110 Vac, 220 - 240 Vac, 380 - 415, 50 / 60 Hz, 220 Vdc, 110 Vdc, 48 Vdc, 24 Vdc
Auxiliary circuits	:	6NO6NC and 4NO4NC AC-15: 2 A at 230 Vac / 240 Vac / 400 Vac / 415 Vac, 50 / 60 Hz DC-13: 0,25 A at 110 Vdc / 220 Vdc U _i : 500 V, U _{imp} : 6 kV, Rated conditional short-circuit current: 1 kA Fuse: RL6-25/6, gG, 6 A, 500 V, 7,5 kA

Product rating - Ex9A16-Q

rated ultimate short-circuit breaking capacity (Icu)	: 66 kA at 380 / 400 / 415 / 440 Vac, 50 kA at 525 / 660 / 690 Vac
rated service short-circuit breaking capacity (Ics)	: 66 kA at 380 / 400 / 415 / 440 Vac, 50 kA at 525 / 660 / 690 Vac
rated short-time withstand current (Icw)	: 55 kA - 1 s at 380 / 400 / 415 / 440 Vac, 50 kA - 1 s at 525 / 660 / 690 Vac, 30 kA - 3 s at 380 / 400 / 415 / 440 / 525 / 660 / 690 Vac

Product rating - Ex9A16

rated ultimate short-circuit breaking capacity (Icu)	: 55 kA at 380 / 400 / 415 / 440 Vac, 42 kA at 525 / 660 / 690 Vac
rated service short-circuit breaking capacity (Ics)	: 55 kA at 380 / 400 / 415 / 440 Vac, 42 kA at 525 / 660 / 690 Vac
rated short-time withstand current (Icw)	: 42 kA - 1 s at 380 / 400 / 415 / 440 / 525 / 660 / 690 Vac

Additional information

Ex9A 16 - Q

a b c

a = model name: 'Ex9A'

b = frame size: '16' means '1600 A'

c = short-circuit capacity: 'Q' or blank