

ATTESTATION OF CONFORMITY

Issued to: HIMEL HONG KONG LIMITED
11/F KERRY CTR 683 KING'S RD 999077 Quarry Bay, Hong Kong

For the product: Air Circuit Breaker

Trade name: HIMEL

Type/Model: HDW3-1000M

Ratings: Ue: 220 / 230 / 240 / 380 / 400 / 415 / 440 / 480 / 500 / 525 / 550 / 660 / 690 Vac,
50 / 60 Hz
Ui: 1000 V, Uimp: 12 kV
In: 200 A, 400 A, 630 A, 800 A, 1000 A
3P and 4P (N pole with overcurrent protection)
See annex for further ratings

Manufactured by: DELIXI ELECTRIC LTD.
Delixi High-Tech Industrial Park, Liushi Town, Yueqing City, 325604 Zhejiang
Province, China

Subject: Type test

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

Remark: The attestation is based on AoC 3322523.01A issued on 2022-03-01.

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in a test report no 3324093.50 issued on 2022-03-17.

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, 22 March 2022 Number: 3324093.01A

DEKRA Testing Services (Zhejiang) Co., Ltd

Ms J Guo
Certification Manager

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Ratings:

Number of poles	: 3P and 4P (N pole with overcurrent protection)
Protected pole	: 3 or 4
Rated operational voltage (Ue)	: 220 / 230 / 240 / 380 / 400 / 415 / 440 / 480 / 500 / 525 / 550 / 660 / 690 Vac
Rated insulation voltage (Ui)	: 1000 V
Rated impulse withstand voltage (Uimp)	: 12 kV
Rated frequency	: 50 / 60 Hz
Rated current (In)	: 200 A, 400 A, 630 A, 800 A, 1000 A
Conventional thermal current (Ith)	: Equal to In
Current rating for four-pole circuit-breakers	: Equal to In
Rated service short-circuit breaking capacity (Ics)	: 30 kA at 220 / 230 / 240 / 380 / 400 / 415 Vac, 25 kA at 440 / 480 / 500 / 525 / 550 / 660 / 690 Vac
Rated ultimate short-circuit breaking capacity (Icu)	: 42 kA at 220 / 230 / 240 / 380 / 400 / 415 Vac, 25 kA at 440 / 480 / 500 / 525 / 550 / 660 / 690 Vac
Rated short-time withstand current (Icw)	: 30 kA - 1 s at 220 / 230 / 240 / 380 / 400 / 415 Vac, 20 kA - 1 s at 440 / 480 / 500 / 525 / 550 / 660 / 690 Vac
Suitable for isolation	: Suitable
Selectivity category	: B
Safety distance (screen-circuit breaker)	: All sides: 0 mm
Method of mounting	: Fixed or withdrawable
EMC environment	: A
Tightening torque for terminals	: M10 / 50 Nm
Line/load terminal	: Immaterial
Connection	: Minimum cross-sectional area of conductor (copper conductor with cable lug): 95 mm ² Maximum cross-sectional area of conductor (Copper busbar): (60 x 5) mm ² x 2
Inverse time delay release	: For trip unit: iTR326H, iTR326, Genius 4.0H and Genius 4.0: I _r : (0,4 / 0,5 / 0,6 / 0,7 / 0,8 / 0,9 / 0,95 / 0,98 / 1) x I _n For trip unit: iTR326A and Genius 4.0A: I _r : (0,4 - 1) x I _n , in steps of 1 A
Time setting of the inverse time delay release	tr: 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) tripping time at 2 I _r : 8,1 s - 9,9 s (tr = 1 s) 243 s - 297 s (tr = 30 s)
Short time delay release	: For trip unit: iTR326H, iTR326, Genius 4.0H and Genius 4.0: I _{sd} : (1,5 / 2,0 / 3,0 / 4,0 / 5,0 / 6,0 / 8,0 / 10) x I _r , off For trip unit: iTR326A and Genius 4.0A: I _{sd} : (1,5 - 10) x I _r , off in steps of 1 A for I _{sd} < 10 kA, in steps of 0,01 kA for I _{sd} ≥ 10 kA

Time setting of the short time delay release	tsd: 0,1 s / 0,2 s / 0,3 s / 0,4 s (I^2t off) 0,1 s, with tolerance of 80 ms - 140 ms 0,2 s, with tolerance of 140 ms - 200 ms 0,3 s, with tolerance of 230 ms - 320 ms 0,4 s, with tolerance of 350 ms - 500 ms non-tripping duration: Set at 0,1 s: 80 ms Set at 0,2 s: 140 ms Set at 0,3 s: 230 ms Set at 0,4 s: 350 ms
Instantaneous release	: For trip unit: iTR326H, iTR326, Genius 4.0H and Genius 4.0: li: (2 / 3 / 4 / 6 / 8 / 10 / 12 / 15) x I_n , off For trip unit: iTR326A and Genius 4.0A: li: (2 - 15) x I_n , off in steps of 1 A for $I_i < 10$ kA, in steps of 0,01 kA for $I_i \geq 10$ kA
Making current release (MCR) Ground fault release	: 16 kA For trip unit: iTR326H, iTR326, Genius 4.0H and Genius 4.0: I _g : (0,2 / 0,3 / 0,4 / 0,5 / 0,6 / 0,8 / 0,9 / 1,0) x I_n , off For trip unit: iTR326A and Genius 4.0A: I _g : (0,2 - 1,0) x I_n , OFF, in steps of 1 A t _g : 0,1, 0,2, 0,3, 0,4 s 0,1 s, with tolerance of 80 ms - 140 ms 0,2 s, with tolerance of 140 ms - 200 ms 0,3 s, with tolerance of 230 ms - 320 ms 0,4 s, with tolerance of 350 ms - 500 ms
Shunt release	: 220 / 230 Vac, 380 / 400 Vac (50/60 Hz) 110 Vdc, 220 Vdc
Under-voltage release	: 220 / 230 Vac, 380 / 400 Vac (50/60 Hz)
Closing coil	: 220 / 230 Vac, 380 / 400 Vac (50/60 Hz) 110 Vdc, 220 Vdc
Stored energy motor	: 220 / 230 Vac, 380 / 400 Vac (50/60 Hz) 110 Vdc, 220 Vdc
External supply for trip unit	: 220 / 230 Vac, 380 / 400 Vac (50/60 Hz) 110 Vdc, 220 Vdc

Additional information:

Nomenclature breakdown:

HDW3-1000 M

a b c

a = Model name: HDW3

b = Frame size: 1000

c = short-circuit capacity: 'M'