ATTESTATION OF CONFORMITY

Issued to: HIMEL TECHNOLOGY S.L.

Calle Bac de Roda, No.52, Edificio A 08019 Barcelona, Spain

For the product: Moulded-Case Circuit Breaker

Trade name: HIMEL

Type/Model: HDM3 series

Ratings: Ue: 400 Vac / 415 Vac, Ui: 800 Vac, Uimp: 8 kV

In: 40 A to 630 A

3P or 3P+ N (N does not have protection, N is interrupted or uninterrupted)

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

Remark: This Attestation is based on AoC no. 3312804.01A issued on 2017/12-18 and

replaces AoC no. 3308159,02A issued on 2015-09-01

Requirements: EN 60947-2:2017 / JEC 60947-2:2016

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in test report nos. 3311638.50 issued on 2017-12-13, 3312804.50 issued on 2017-12-08, 3311637.50 issued on 2017-09-27, 3308159.50 issued on 2015-08-17, 3306791.50 issued on 2015-07-02, 3306940.50, 3306941.50, 3306942.50 and 3306943.50 issued on 2015-01-26.

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.

Wenzhou, Zhejiang, 20 December 2017 // Number: 3311638.01A

DEKRA Testing Services (Zhejiang) Co., Ltd.

Ms J Guo Certification Manager

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

DEKRA Testing Services (Zhejiang) Co., Ltd.



ANNEX TO ATTESTATION OF CONFORMITY no. 3311638.0

Ratings:

number of poles : 3P or 4P (3P+N, N is interrupted or uninterrupted)

protected poles : 3P

rated operational current (le) : Equal to In conventional thermal current (lth) : Equal to In rated operational voltage (Ue) : 400 Vac / 415 Vac

rated insulation voltage (Ui) : 800 V rated impulse withstand voltage : 8 kV

(Uimp)

rated frequency : 50/60 Hz suitable for isolation : Yes utilization category : A method of mounting : Fixed EMC Environment : A and B reference temperature : 40 °C circuit-breaker for use on phase-

earthed systems

inverse time delay release : Thermal type, Fixed tripping time at 2ln : 180 s to 420 s instantaneous release : Magnetic type, fixed,

2 poles in series: li = 10 ln

single pole: 12 In

line/load terminal : Marked

connection : Copper conductor with cable lug or

copper bars (start from 400 A)

Ratings - type HDM3-100F

rated current (In) : 40 A, 50 A, 63 A, 70 A, 80 A, 100 A

circuit-breaker for use in IT systems : Yes, 1,2 kA at 415 Vac

safety distance : Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

35 kA 26 kA

Ratings - type HDM3-100M

rated current (In) : 40 A, 50 A, 63 A, 70 A, 80 A, 100 A

circuit-breaker for use in IT systems : Yes, 1,2 kA at 415 Vac safety distance : Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking :

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

26 kA



Ratings - type HDM3-100N

rated current (In) : 40 A, 50 A, 63 A, 70 A, 80 A, 100 A

circuit-breaker for use in IT systems : Yes, 1,2 kA at 415 Vac safety distance : Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

30 kA

50 kA

Ratings - type HDM3-100T

rated current (In) : 40 A, 50 A, 63 A, 70 A, 80 A, 100 A

circuit-breaker for use in IT systems : Yes, 1,2 kA at 415 Vac safety distance : Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking : 30 kA

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

30 kA

Ratings - type HDM3-160S

rated current (In) : 100 A, 125 A, 140 A, 160 A

circuit-breaker for use in IT systems : Yes, 3 kA at 415 Vac

safety distance : Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

: 21 kA

35 kA

Ratings - type HDM3-160L

rated current (In) : 100 A, 125 A, 140 A, 160 A

circuit-breaker for use in IT systems : Yes, 3 kA at 415 Vac

safety distance : Up: 50 mm, Down: 0 mm, Left/Right: 10 mm,

Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

21 kA

: 21 kA



Ratings - type HDM3-160F

rated current (In) 100 A, 125 A, 140 A, 160 A

Yes, 3 kA at 415 Vac circuit-breaker for use in IT systems Up: 50 mm, Down: 0 mm, safety distance

> Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

50 kA

30 kA

Ratings - type HDM3-160N

rated current (In) 100 A, 125 A, 140 A, 160 A

circuit-breaker for use in IT systems Yes, 3 kA at 415 Vac

Up: 50 mm, Down: 0 mm, safety distance Left/Right: 10 mm,

Front/Back: 0 mm 60 kA

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

36 kA

Ratings - type HDM3-160M

rated current (In) 100 A, 125 A, 140 A, 160 A

Yes, 3 kA at 415 Vac circuit-breaker for use in IT systems

Up: 50 mm, Down: 0 mm, safety distance

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

30 kA 30 kA

Ratings - type HDM3-160T

rated current (In) 100 A, 125 A, 140 A, 160 A

Yes, 3 kA at 415 Vac circuit-breaker for use in IT systems safety distance Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking 36 kA

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)



Ratings - type HDM3-250S

rated current (In) : 100 A, 125 A, 140 A, 150 A, 160 A, 175 A, 180 A,

200 A, 225 A, 250 A Yes, 3 kA at 415 Vac

circuit-breaker for use in IT systems

safety distance

Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

35 kA

rated service short-circuit breaking

capacity (Ics)

: 21 kA

Ratings - type HDM3-250L

rated current (In) : 100 A, 125 A, 140 A, 150 A, 160 A, 175 A, 180 A,

200 A, 225 A, 250 A

circuit-breaker for use in IT systems

safety distance

Yes, 3 kA at 415 Vac Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking :

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

: 21 kA

21 kA

Ratings - type HDM3-250F

rated current (In) : 100 A, 125 A, 140 A, 150 A, 160 A, 175 A, 180 A,

200 A, 225 A, 250 A

circuit-breaker for use in IT systems

safety distance

Yes, 3 kA at 415 Vac Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

: 30 kA

50 kA

Ratings - type HDM3-250N

rated current (In) : 100 A, 125 A, 140 A, 150 A, 160 A, 175 A, 180 A,

200 A, 225 A, 250 A

circuit-breaker for use in IT systems

safety distance

Yes, 3 kA at 415 Vac Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

60 kA



Ratings - type HDM3-250M

rated current (In) : 100 A, 125 A, 140 A, 150 A, 160 A, 175 A, 180 A,

200 A, 225 A, 250 A

circuit-breaker for use in IT systems

safety distance

Yes, 3 kA at 415 Vac Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

: 30 kA

rated service short-circuit breaking

capacity (Ics)

30 kA

Ratings - type HDM3-250T

rated current (In) : 100 A, 125 A, 140 A, 150 A, 160 A, 175 A, 180 A,

200 A, 225 A, 250 A

circuit-breaker for use in IT systems

safety distance

Yes, 3 kA at 415 Vac Up: 50 mm, Down: 0 mm,

Left/Right: 10 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

36 kA

36 kA

Ratings - type HDM3-400S

rated current (In) : 200 A, 225 A, 250 A, 300 A, 315 A, 350 A, 400 A

circuit-breaker for use in IT systems

safety distance

Yes, 7,56 kA at 415 Vac Up: 100 mm, Down: 0 mm,

Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

: 35 kA

rated service short-circuit breaking

capacity (Ics)

: 21 kA

Ratings - type HDM3-400L

rated current (In) : 200 A, 225 A, 250 A, 300 A, 315 A, 350 A, 400 A

circuit-breaker for use in IT systems

safety distance

Yes, 7,56 kA at 415 VacUp: 100 mm, Down: 0 mm,

Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

21 kA

: 21 kA





Ratings - type HDM3-400F

rated current (In) 200 A, 225 A, 250 A, 300 A, 315 A, 350 A, 400 A

circuit-breaker for use in IT systems Yes, 7,56 kA at 415 Vac Up: 100 mm, Down: 0 mm, safety distance

> Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking 50 kA

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

30 kA

Ratings - type HDM3-400N

rated current (In) 200 A, 225 A, 250 A, 300 A, 315 A, 350 A, 400 A

circuit-breaker for use in IT systems Yes, 7,56 kA at 415 Vac safety distance Up: 100 mm, Down: 0 mm,

> Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

rated service short-circuit breaking

capacity (Icu)

capacity (lcs)

39 kA

70 kA

Ratings - type HDM3-400M

rated current (In) 200 A, 225 A, 250 A, 300 A, 315 A, 350 A, 400 A

circuit-breaker for use in IT systems Yes, 7,56 kA at 415 Vac safety distance Up: 100 mm, Down: 0 mm,

Left/Right: 30 mm,

Front/Back: 0 mm 30 kA

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (lcs)

30 kA

Ratings - type HDM3-400T

rated current (In) 200 A, 225 A, 250 A, 300 A, 315 A, 350 A, 400 A

circuit-breaker for use in IT systems Yes, 7,56 kA at 415 Vac Up: 100 mm, Down: 0 mm, safety distance

> Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

39 kA





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Ratings - type HDM3-630S

rated current (In) : 200 A, 225 A, 250 A, 315 A, 350 A, 400 A, 450 A,

500 A, 600 A, 630 A

circuit-breaker for use in IT systems

safety distance

Yes, 7,56 kA at 415 Vac Up: 100 mm, Down: 0 mm,

Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

35 kA

: 21 kA

Ratings - type HDM3-630L

rated current (In) : 200 A, 225 A, 250 A, 315 A, 350 A, 400 A, 450 A,

500 A, 600 A, 630 A Yes, 7,56 kA at 415 Vac

circuit-breaker for use in IT systems

safety distance

: Up: 100 mm, Down: 0 mm,

Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

21 kA

rated service short-circuit breaking

capacity (Ics)

21 kA

Ratings - type HDM3-630F

rated current (In) : 200 A, 225 A, 250 A, 315 A, 350 A, 400 A, 450 A,

500 A, 600 A, 630 A

circuit-breaker for use in IT systems

safety distance

: Yes, 7,56 kA at 415 Vac : Up: 100 mm, Down: 0 mm,

Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

50 kA

rated service short-circuit breaking

capacity (Ics)

30 kA

Ratings - type HDM3-630N

rated current (In) : 200 A, 225 A, 250 A, 315 A, 350 A, 400 A, 450 A,

500 A, 600 A, 630 A

circuit-breaker for use in IT systems

safety distance

Yes, 7,56 kA at 415 Vac Up: 100 mm, Down: 0 mm,

Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

rated service short-circuit breaking

capacity (Ics)

: 39 kA



Ratings - type HDM3-630M

rated current (In) : 200 A, 225 A, 250 A, 315 A, 350 A, 400 A, 450 A,

500 A, 600 A, 630 A

circuit-breaker for use in IT systems : Yes, 7,56 kA at 415 Vac

safety distance : Up: 100 mm, Down: 0 mm,

Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking

capacity (Icu)

· ·

rated service short-circuit breaking

capacity (Ics)

30 kA

30 kA

Ratings - type HDM3-630T

rated current (In) : 200 A, 225 A, 250 A, 315 A, 350 A, 400 A, 450 A,

500 A, 600 A, 630 A

circuit-breaker for use in IT systems :

safety distance

Yes, 7,56 kA at 415 Vac Up: 100 mm, Down: 0 mm,

Left/Right: 30 mm, Front/Back: 0 mm

rated ultimate short-circuit breaking : 39 kA

capacity (Icu)

rated service short-circuit breaking

capacity (lcs)

39 kA

Additional information

Nomenclature breakdown:

HDM3-<u>100</u> <u>F/A3XX</u>

a bc d

a - code denoting the frame size: 100, 160, 250, 400 or 630

b - code denoting the short-circuit capacity: F, N, M, T, S or L (S and L are not available for frame 100)

c - code denoting the number of poles: 'A' means 4P MCCBs with uninterrupted Neutral; 'B' means 4P MCCBs with interrupted Neutral; '3' means 3P MCCBs

d - code denoting no auxiliary circuit and control circuit