DNV-G

DNV GL SE * P.O. Box 11 16 06 * 20416 Hamburg/Germany

Shanghai Top Motor Co., Ltd.

Mr. Huang Wenscheng No.303 Kangliu Road Kangqiao Town Pudong, Shanghai, 201315, CHINA

DNV GL SE P.O. Box 11 16 06 20416 Hamburg Brooktorkai 18 20457 Hamburg Germany Phone +49 40 36149-0 Fax +49 40 36149-200 headoffice@dnvgl.com www.dnvgl.com

Your reference Huang Wenscheng

Your letter of Our reference 14-069675/HEIHES 2014-07-31

Extension +49 40 36149-257 2014-07-31

Date

Type Approval Certificates No. 61999 14 HH and 62000 14 HH

Dear Mr. Huang Wenscheng,

enclosed please find the above mentioned updated Type Approval Certificates for your Induction Motors free of charge. The sister certificates we will send directly to Klee drives Denmark.

Motors free of charge. The second Motors free of charge free of charge. The second Motors free of charge free of charge. The second Motors free of charge free of charge free of charge free of charge. The second Motors free of charge parts of the search terms. By specifying the certificate number, you can call up the certificates in

Invalid certificates are marked with "expired" in the result page.

From 2008 the invalid certificates will remain published on the Internet for 1 year.

The expired certificates can be renewed.

Yours faithfully

for DNV G

haarmann

Heinz-Dieter Hespe

DNV-GL

TYPE APPROVAL CERTIFICATE

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No.

61 999 - 14 HH

Company

Shanghai Top Motor Co., Ltd.

No.303 Kangliu Road Kangqiao Town Pudong, Shanghai, 201315, CHINA

Product Description

Induction Motors Aluminium frame

MS.., MS2.., frame sizes 56 up to 200

T1A.., T2A.., T3A.., TAI.., TAP.., frame sizes 56 up to 200

Environmental Category

Technical Data / Range of Application

Place of manufacturing: 1. SHANGHAI TOP MOTOR CO., LTD.

No. 303 KANGLIU Rd, KANGQIAO Town

2. SHANGHAI HIMAK ELECTRICAL MA.. CO., LTD. No. 568 YUANXI Rd, NANHUI Industry Area both located in Pudong, Shanghai, P. R. China 1, 2, 3, S, S1, S2, M, M1, M2, L, L1, L2

Sizes:

Rated voltage:

Rated power, Duty Type: Synchronous speed:

220 V up to 690 V S1 0,09 kW up to 37 kW 750 1/min up to 3600 1/min 50 Hz, 60 Hz

Rated frequency: Ambient temperature:

45 °C 155 (F)

Thermal class: Degree of protection:

IP 55, IP 56, IP 65 2, 4, 6 and 8

No. Of poles: Spec. Model:

For marine applications / environments

Test Standard

IEC 60034-1 / 2010-02

GL Guidelines for the Performance of Type Approvals, VI-7-6 part 4, ed. 1999

Documents

Drawing: 1TB.010.166 - 172.A-0 dated 2014-03-13

Technical data: TECHTOP MS-serie, page 3 to 5

Test report: T2A 180L-4, Report No. 20140311002 dated 2014.03.11 Catalogue: SHANGHAI TOP MOTOR CO., LTD, TECHTOP Motor 2013

Remarks

This certificate is issued on the basis of GL Guidelines for the Performance of

Type Approvals, Chapter 1 - Procedure (VI-7-1), Edition 2007

Valid until 2019-04-01

Page

1 of 1

File No.

I.G.03

Hamburg, 2014-07-31

Type Approval Symbol

DNV GL

Arne Schaarmann

Heinz-Dieter Hespe

DNV-GL

TYPE APPROVAL CERTIFICATE

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No.

62 000 - 14 HH

Company

Shanghai Top Motor Co., Ltd.

No.303 Kangliu Road Kanggiao Town Pudong, Shanghai, 201315, CHINA

Product Description

Induction Motors Cast iron frame

Type

T1C.., T2C.., T3C.., frame sizes 80 up to 355

TCI.., TCP.., frame sizes 80 up to 355

Environmental Category

Technical Data / Range of Application Place of manufacturing:

SHANGHAI HIMAK ELECTRICAL MA.. CO., LTD. No. 568 YUANXI Rd, NANHUI Industry Area

Pudong, Shanghai, P. R. China

Sizes:

Rated voltage: Rated power, Duty Type:

Synchronous speed:

Rated frequency: Ambient temperature:

Thermal class: Degree of protection:

No. Of poles: Spec. Model:

1, 2, 3, S, S1, S2, M, M1, M2, L, L1, L2

220 V up to 690 V

S1 0,75 kW up to 315 kW 750 1/min up to 3600 1/min 50 Hz, 60 Hz

45 °C 155 (F)

IP 55, IP 56, IP 65

2, 4, 6 and 8

For marine applications / environments

Test Standard

IEC 60034-1 / 2010-02

GL Guidelines for the Performance of Type Approvals, VI-7-6 part 4, ed. 1999

Documents

Drawing: 8MHY.010.T035; 8MHY.010.T036 dated 2014-03-12

Technical data: TECHTOP, T.C-serie page 44 - 46

Test report: T3C 315L2-6, Report No. 20140312001 dated 2014.03.11 Catalogue: SHANGHAI TOP MOTOR CO., LTD, TECHTOP Motor 2013

Remarks

This certificate is issued on the basis of GL Guidelines for the Performance of

Type Approvals, Chapter 1 - Procedure (VI-7-1), Edition 2007

Valid until 2019-04-01

Page

1 of 1

File No.

I.G.03

Hamburg, 2014-07-31

Type Approval Symbol

Arne Schaarmann

Heinz-Dieter Hespe

DNV GL