



CERTIFICATE NUMBER

DATE

04-SQ435868/1-PDA

05 April 2009

ABS TECHNICAL OFFICE

Shanghai Engineering Services

# CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of  
**ABB SHANGHAI MOTORS CO., LTD - SHANGHAI**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Motor

MODEL: M2QA Series

ABS RULE: 2009 Steel Vessel Rules 1-1-4/3.7, 4-8-3/3

OTHER STANDARD: NA

AMERICAN BUREAU OF SHIPPING

Takeshi Matsumoto

Manager of Engineering Services - Machinery



File Ref: T-8-6/CZ  
ORA: 2000769/ Ref. 463905

16 July 2009

Marine 3-phase Asynchronous Motor  
**M2QA Series**

**Type Approval - Product Design Assessment**

ABB Shanghai Motors Co. Ltd.  
88, Tianning Road, Minhang Economic  
& Technological Development Zone,  
Shanghai 201100, P. R. China

Attention: Ms. Wang Shu-ying

Gentlemen:

We have notification from the attending surveyor of successful completion of the component testing as described in our letter of 13 October 2008 (385773). We are pleased to advise that the design assessment phase of the type approval process for renew M2QA series marine three phase asynchronous motor (add model 355LA) has been completed.

Enclosed is your original copy of the Certificate of Design Assessment. Please read the pages attached to the certificate to be sure that you understand the scope and conditions of the validity of the certificate. Since the original certificate is multi-colored, we have no objections to unlimited black and white photocopies of the certificate being distributed.

Thank you for considering ABS for your certification needs. If you should have any comments relative to the scope and conditions of the assessment of your product, or if we may be of further assistance, please do not hesitate to contact Ms. Geng, Yu at +86-21-2327 0833. In any case of inquiry by a telephone or reply by a document, please inform or refer to Ref. & Date of this letter.

Very truly yours,

**AMERICAN BUREAU OF SHIPPING**

Thomas Kirk  
Vice President of Engineering

By: \_\_\_\_\_

Cheng Zong  
Senior Engineering Specialist – Machinery

cc: ABS Shanghai OPTS w/p

**ABS PACIFIC DIVISION**

5TH FLOOR, SILVER TOWER, NO. 85 TAO YUAN ROAD, LUWAN DISTRICT, SHANGHAI 200021, P. R. CHINA,  
TEL: 86-21-23270888 FAX: 86-21-63229649 (OPERATION) / 63605391 (ENGINEERING) WEBSITE: www.eagle.org

**ABB SHANGHAI MOTORS CO., LTD**  
88, TIANNING ROAD  
MINHANG ECONOMIC AND TECHNOLOGICAL  
DEVELOPMENT ZONE  
SHANGHAI  
200245  
China  
Telephone: +86-21-5472-3133  
Fax: +86-21-54725009

---

**PRODUCT:**

Motor

**MODEL:**

M2QA Series

**Intended Service:**

Three Phase Induction Motor for Marine Use

**Description:**

Three Phase Induction Motor for Marine Use

**Ratings:**

50Hz, 750 r/min ~ 3000 r/min, or

60Hz, 900 r/min ~ 3600 r/min

A.C. 200V~690V

Rated Output: 0.75kW~362.5kW

Rated Ambient Temperature: 50 O/C

Degree of Protection: IP55 or IP56

Class of Insulation: F

No. of Bedplate: 112,132,160, 180, 225, 250, 280, 315, MA;

132,160, MB;

132,225,280,315, SA;

132, SB;

100,160,180,200,315,355, LA;

100,200,315, LB.

**Service Restriction:**

Unit Certification is required for motor of 100 kW and over for essential service

**Comments:**

Not Applicable

**Notes / Drawings / Documentation:**

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

**Term of Validity:**

This product/model is covered under Product Design Assessment (PDA) Certificate XX-XXXXXXXX/XX-PDA, dated DD/MMM/YYYY. This PDA Certificate expires MMM of YYYY. It will remain valid for five years from date of issue or until the Rules or specifications used in the assessment are revised (whichever occurs first).

**STANDARDS**

**ABB SHANGHAI MOTORS CO., LTD**

**ABS Rules:**

2009 Steel Vessel Rules 1-1-4/3.7, 4-8-3/3

**National:**

--- NA ---

**International:**

--- NA ---

**Government Authority:**

--- NA ---

**EUMED:**

--- NA ---

**Others:**

--- NA ---