

MARINE DIVISION
17 Bis Place des Reflets - La Défense 2
92400 Courbevoie - France
Tel. 33 1 42 91 53 48
Fax 33 1 42 91 28 94



Certificate N°:
05818/C0 BV
The attached Schedule forms part of the certificate
File Number : ACE 04/840/01
Product Code : 2584I

CERTIFICATE OF TYPE APPROVAL

This is to certify that the product identified below was found to be in compliance with the relevant hereunder stated Regulations & standards

ASYNCHRONOUS MACHINES **THREE-PHASE ASYNCHRONOUS MOTORS with SQUIRREL-CAGE.**

MANUFACTURED BY:

VEM motors GmbH
Wernigerode - GERMANY

SPECIFIED REGULATIONS & STANDARDS :
BV Rules for the Classification of Steel Ships.

The Approval is valid until : 24.07.2008

BUREAU VERITAS HAMBURG



At Paris la Défense, on : 24.07.2003

J.BENOIT
For the Secretary

This Certificate remains valid until the date stated on, hereunder, unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory into service.

This Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested.

This Certificate is not valid without the stamp of the above mentioned by BUREAU VERITAS Inspection Center.

The manufacturer should notify BUREAU VERITAS of any modification or changes to the equipment in order to obtain a valid Certificate.

The latest published Regulations or Standards referred to, above, and the Marine Division General Conditions are applicable.



**BUREAU
VERITAS**
MARINE DIVISION

File Number : ACE 04/840/01

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

THREE-PHASE ASYNCHRONOUS MOTORS with SQUIRREL-CAGE for low voltage type **K10R...** and **K11R...**

- . Shaft height: 112 to 315 for the type K10R...
 132 to 315 for the type K11R...
- . Number of poles: 2, 4, 6, 8, 10, 12 and multiple pole-changing
- . Voltage : Up to 750V / 3 ph 50 / 60 Hz
- . Insulation class: F
- . Ambient temperature: 50°C
- . Type of service: S1 (continuous duty)
- . Protective degree: IP 55/56
- . Motor data: Following list ZA 744 sheet 2
- . Cast iron frame GG 20
- . Alloying aluminium squirrel cage rotor.

2. DESIGN DRAWINGS and/or SPECIFICATIONS

Specification filed in ACE 08/840/01.

3. TYPE TEST REPORTS / LABORATORY RECOGNITION STATUS

4. MATERIALS and/or COMPONENTS REQUIRED TO BE TYPE APPROVED

Nil.

5. OTHER MATERIALS and/or COMPONENTS

Nil.

6. APPLICATION / LIMITATION OF USE

BV Rules for the Classification of Steel Ships.

7. PRODUCTION SURVEY REQUIREMENTS

Arrangement should be made for a Society's Surveyor to inspect equipment of the type referred to in this certificate which is intended for use on BUREAU VERITAS registered ships at the Manufacturer's works.

8. ON BOARD INSTALLATION & MAINTENANCE REQUIREMENTS

According to BV Rules for the Classification of Steel Ships.

9. MARKING FOR IDENTIFICATION

- Maker's name or trade mark,
- Serial number of the units,
- Equipment type number or model identification under which it was type-tested.

10. OTHERS

10.1 - This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and **MEM MOTOR GmbH**, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

10.2 - This certificate supersedes the Type Approval Certificate N° 2584/5818/B0/PRS0 BV issued by the Society on 15/05/1999.

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