



Marine & Offshore

Certificate number: 19666/D0 BV File number: ACE 04/848/01 Product code: 2584H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to CEMP SrI

Senago (MI) - ITALY

for the type of product

ASYNCHRONOUS MACHINES (Power below 100kW)

Flameproof motors series AB..r and AC..r

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships IEC 60034-1 (2022)

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 19 Mar 2029

For Bureau Veritas Marine & Offshore, At BV NAPOLI, on 19 Mar 2024, Alessandro Asborno

This certificate was created electronically and is valid without signature



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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THE SCHEDULE OF APPROVAL

<u>1. PRODUCT DESCRIPTION:</u>

Flameproof electrical motors series AB..r - AC..r

Three phase and single phase squirrel cage asynchronous induction motors Protection: II 2G Ex db IIB T6...T3 Gb or II 2G Ex db eb IIB T6...T3 Gb II 2G Ex db IIC T6...T3 Gb or II 2G Ex db eb IIC T6...T3 Gb II 2D Ex tb IIIC (or IIIB) T85°C...T150°C Db

Number of poles:	2 to 8 and combination		
Cast iron frame:	Size 63 to 315		
Power supply:	400 V / 50Hz - 440 / 60 Hz		
Totally enclosed, fan cooled, frame:	IP 55 with terminal IP 65		
Ambient temperature:	40°C -45°C - 50°C		
Duty type: S1, S2 S9	according to IEC standard		
Insulation class:	F or H		
Temperature rise:	class B or F		
Rated power at S1 duty 50 Hz:	0.1 kW to 95 kW		

Range of motors:

Versions	Frame size mm	Output range (2 poles 50 Hz) KW	Type Ex d IIB	Type Ex de IIB	Type Ex d IIC	Type Ex de IIC
Single speed 3 phase (2, 4, 6, 8 poles)	63 - 280	0.25 - 90.00	AB30r	AB35r	AC30r	AC35r
Two speeds 3 phase (2/4, 4/8, 4/6, 6/8 poles) Constant torque	63 - 315	0.15 - 95.00	AB20r	AB25r	AC20r	AC25r
Two speeds 3 phase (2/4, 4/8, 4/6, 6/8 poles) Quadratique torque	63 - 315	0.18 - 95.00	AB40r	AB45r	AC40r	AC45r
Single phase (2, 4, 6 poles)	63 - 100	0.10 - 3.00	AB10r	AB15r	AC10r	AC15r
Single phase with condenser in extra-size terminal box (2, 4, 6 poles)	63 - 100	0.10 - 1.10	AB12r	-	AC12r	-
Motors with frequency converter drive (2, 4, 6, 8 poles)	63 - 280	0.08 - 90.00	AB70r	AB75r	AC70r	AC75r

2. DOCUMENTS AND DRAWINGS:

Cemp SpA catalogue dated Jul 2022.

3. TEST REPORTS:

EC type examination certificate

- N°TUV IT 14 ATEX 065 X Rev. 9, dated 26 Jan 2023.
- N°TUV IT 14 ATEX 050 X Rev. 9, dated 26 Jan 2023.

Electrical tests

- CMP 13020654000 dated 07/10/2003
- CMP 13020754000 dated 19/11/2003
- CMP 13020854000 dated 15/01/2004
- CMP 13020954000 dated 20/01/2004
- CMP 13041054000 dated 21/01/2004
- CMP 13041134000 dated 27/01/2004
- CMP 13021376900 dated 04/02/2004
- CMP 13021676900 dated 20/02/2004
- CMP 13041876900 dated 17/03/2004
- CMP 13022056900 dated 07/04/2004
- CMP 13042236900 dated 12/05/2004
- CMP 13042556900 dated 20/03/2007
- CMP 13042856900 dated 18/01/2005
- CMP 13042896900 dated 26/01/2005

4. APPLICATION / LIMITATION:

4.1 - According to BV Rules for the Classification of Steel Ships and IEC 60092 series.

4.2 - Conditions of the ATEX certificates issued by TUVItalia must be fulfilled.

4.3 - Ex-certification is not covered by this certificate. Applications in hazardous areas are to be approved in each case according to the Rules and Conditions for Safe Use specified in a valid Ex-Certificate issued by a Notified or Recognised Certification Body.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above products are to be supplied by CEMP Srl in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **CEMP Srl** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **CEMP Srl** has declared to Bureau Veritas the following production site:

CEMP Srl Via Piemonte 16 20030 Senago (MI) ITALY

6. MARKING OF PRODUCT:

Name plate according to IEC 60034-1 and directive 2014/34/UE.

7. OTHERS:

7.1 - It is **CEMP Srl**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 19666/C0 BV issued on 14 Jul 2018 by the Society.

*** END OF CERTIFICATE ***