



MARINE DIVISION

Certificate number: 34173/A0 BV

File number: ACM159/701/2

Product code: 0240I

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

GALI INTERNACIONAL S.A.

Sentmenat (Barcelona) - SPAIN

for the type of product

INTERNAL COMBUSTION ENGINE STARTING DEVICES

Models S30 & S38

Requirements:

BUREAU VERITAS Rules for the Classification of Steel Ships.

This certificate is issued to attest that BUREAU VERITAS 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: 12 Jun 2018

For BUREAU VERITAS,

At BV MADRID, on 12 Jun 2013,

Montserrat Espin



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. 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 Division 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 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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

AIR STARTERS for Diesel Engines S Series

ACM159/701/2 Model S30

ACM159/701/3 Model S38

Composed of an air admission valve, a volumetric gear pneumatic motor driving an epicycloidal gear and the output shaft for the clutch with the flywheel gear of the engine. The air exhaust is fitted with a silencer.

2. DOCUMENTS AND DRAWINGS:

Manual de instrucciones S30 Mesures and technical data air stater S30: S30-PTC

Manual de instrucciones S38 Mesures and technical data air stater S38: S38-PTC

3. TEST REPORTS:

Nil.

4. APPLICATION / LIMITATION:

SERIES	Maximum Air Pressure (bar)	Maximum Power	Maximum Torque (Nm)
S30	30	41.5 kW at 2500 rpm	305
S38	30	42 kW at 2500 rpm	360

The Size of the air starter is to be in accordance with the size of the diesel engine, according to the instructions of the manufacturer.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The AIR STARTERS for Diesel Engines series S are to be supplied by **GALI INTERNACIONAL S.A.** in compliance with the type and the requirements described in this certificate.

5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320.

5.3 - BV product certificate is required.

6. MARKING OF PRODUCT:

- Serial number
- Size
- Rating
- Design Air Pressure
- Bureau Veritas Marks

7. OTHERS:

This approval is given with the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper methods of fitting and general maintenance of the approved equipment and the conditions of this approval.

*** END OF CERTIFICATE ***