

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Winches for survival craft and rescue boats: (a) davit launched lifeboats

with type designation(s)
TBE-20-IV

Issued to

ACEBI S.A.S

Vair Sur Loire, Loire Atlantique, France

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2019/1397,**

item No. MED/1.41a. SOLAS 74 as amended, Regulation III/4, III/16, III/23, III/24, III/34, X/3, LSA Code and 2000 HSC Code

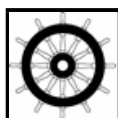
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-05-12.**

Issued at **Høvik** on **2020-05-13**

DNV GL local station:
France CMC

Approval Engineer:
Sorina Thompson



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



1.1 Product description

Winch for davit launched lifeboat

- MWL = 15290kg (3 layers, wire diameter Ø=28mm)

1.2 Application/Limitation

- Grades of materials as stated on drawings are to be delivered with maker's product certificates (3.1).
- The various components transferring the load like wires, shackles, hooks, etc. are to comply with international standard or code and are to be delivered with manufacturer's certificate, confirming a safety factor minimum 6 compared to the sustained load.
- Falls to be used with the launching appliance shall be of rotation-resistant and corrosion-resistant steel wire rope.
- Installation, on-board testing (MSC.81(70) part.2), support to the deck structure, and connection to power supply are not included in this examination and shall be accepted by attending surveyor in each case.

1.3 Type Examination documentation

<u>Document number</u>	<u>Revision</u>	<u>Title</u>
TB-IV-EPI-07-AD	A	Main Section
TB-IV-ECR-07-MS-AD	A	Winch Housing - Welding
TB-IV-ET-08-MS	A	Drums - Welding
TB-IV-ET-08	A	Drums
TB-IV-ECR-07-AD	A	Winch Housing
TB-CL-3620238	A	Key
TB-CL-161060	A	Key
TB-CL-362077	A	Key
TB-B-13510	A	Bush - Drum Shaft

Job Id: **344.1-010437-1**
Certificate No: **MEDB00006GV**

<u>Document number</u>	<u>Revision</u>	<u>Title</u>
TB-CL-3620162	A	Key
TB-B-06010	A	Bush - Intermediate Shaft 1
TB-CL-10866	A	Key
TB-CL-1811200	A	Key
TB-CL-321840	A	Key
TB-B-05510	A	Bush - Intermediate Shaft 2
TB-A-06020	A	Brake Shaft - Axis D
TB-P-57420	A	WHEEL No.III
TB-A-05510	A	Intermediate Shaft 2 - Axis C
TB-A-13912	A	Drum Shaft - Axis A
SAB-11-MS	A	Brake Shoe - Welding
TB-A-06010	A	Intermediate Shaft 1 - Axis B
TB-P-15410	A	PINION No.IV
SAB-11	A	Brake Shoe
EFR-24-D3	B	Centrifugal Brake - Double
SAB-COM-04	B	Garniture
TB-P-08030	A	SHAFT PINION No.Ix - Axis F
TB-P-43010	A	WHEEL No.V
DRS-31	B	Spring
05518TRE-BRAKE1	A	Centrifugal Brake - Data Sheet

<u>Document number</u>	<u>Revision</u>	<u>Title</u>
TB-P-39210	A	WHEEL No.VII
TB-P-18010	A	PINION No.II
TB-P-08810	A	MOTOR PINION No.VIII
TB-P-82030	A	WHEEL No.I
TB-P-14510	A	PINION No.VI
TBE-IV-94-AD	A	General Arrangement Drawing - AD Version
TBE-IV-94-SD	A	General Arrangement Drawing - SD Version
05518TRE-ITS	A	Technical Specification
05518TRE-FATP	A	Fat Procedure
05518TRE-OMM	B	Operation and Maintenance Manual
05518TRE-CAL1	A	Calculation of Winch Type TBE-20-IV
05518TRE-CAL2	A	Calculation of Winch Drum And Flanges
05518TRE-CAL4	A	Calculation of The Corrected Loads Imposed By The Test Bench
05518TRE-CAL3	B	Calculation of Winch Fixing Bolts
TB-P-82030	A	WHEEL No.I
TB-P-14510	A	PINION No.VI
TBE-IV-94-AD	A	General Arrangement Drawing - AD Version
TBE-IV-94-SD	A	General Arrangement Drawing - SD Version
05518TRE-ITS	A	Technical Specification
05518TRE-FATP	A	Fat Procedure

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05518TRE-OMM	B	Operation and Maintenance Manual

1.4 Tests carried out

Prototype tested in accordance with IMO Resolution MSC.81(70) Part 1.

<u>Description</u>	<u>Report</u>	<u>Date(s)</u>	<u>Witnessed by</u>
TBE-IV-94-AD	05518TRE	2020-04-01 and 02	DNV GL France

1.5 Marking of product

Marking shall be implemented in accordance with the LSA Code, item 1.2.2.9 and the Directive:

- Type designation, manufacturer name and serial number
- Maximum Working Load, MWL

END OF CERTIFICATE