



Marine & Offshore

Certificate number: 22309/C0 MED
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This certificate is not valid when presented without the full attached schedule composed of 7 sections
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Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2022/1157 of 4 July 2022

This certificate is issued to:

SURVITEC GROUP LIMITED
 DUNMURRY - UNITED KINGDOM

for the type of product

RIGID/INFLATED RESCUE BOATS
 RIBO 450

Requirements:

SOLAS 74 Convention as amended, Regulations III/4, X/3, III/21, III/31 and III/34
 IMO Res. MSC.48(66) -(LSA Code)- amended by MSC.207(81), MSC.218(82), MSC.272(85), MSC.293(87), MSC.320(89), MSC.368(93), MSC.425(98), MSC.459(101) and MSC.485(103) I, V
 IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 8
 IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 8
 IMO Res. MSC.81(70) amended by MSC.200(80), MSC.226(82), MSC.274(85), MSC.295(87), MSC.321(89), MSC.323(89), MSC.378(93), MSC.427(98), MSC.472(101) and MSC.488(103)
 IMO MSC/Circ.1006 and IMO MSC.1/Circ.1631
 ISO 15372:2000/AMD 1:2021

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate will expire on: 01 Feb 2028


For Bureau Veritas Marine & Offshore Notified Body 2690,

At BV LONDON, on 01 Feb 2023,

Spencer Yule

This certificate was created electronically and is valid without signature



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark ) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

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. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. 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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

Rigid/Inflated Rescue Boat of GRP Construction with 4 points lifting slings, Type: RIBO 450.

Main Particulars	RIBO 450
Length Over All	4.50 m
Breadth	1.90 m

ENGINE TYPE	YAMAHA 25 HP - 4 strokes	YAMAHA 40 HP - 2 strokes	YAMAHA 40 HP - 4 strokes	MERCURY 25 HP - 2 strokes	MERCURY 40 HP - 2 strokes
Light Weight (Fully equipped)	356 kg	396.5 kg	424 kg	349 kg	372 Kg
Light Weight (Fully equipped) + Console	379 kg	419.5 kg	447 kg	372 kg	395 kg
Full Load (6 persons)	851 kg	891.5 kg	919 kg	844 kg	867 kg
Full Load (6 persons) + Console	874 kg	914.5 kg	942 kg	867 kg	890 kg
Fuel oil tank capacity	25 litres (1 x 25L)	50 litres (2 x 25L)	25 litres (1 x 25L)	25 litres (1 x 25L)	25 litres (1 x 25L)

Console: 23 kg

Maximum capacity: 6 persons including one person lying down on a stretcher.

Buoyancy working pressure: 0.24 bar.

2. DOCUMENTS AND DRAWINGS:

Design Report:

Reference Number	Date	Revision	Title	Pages
BF0852-EC	05/01/2023	H	RIBO 450 SOLAS - EC	9

Drawings

Reference Number	Date	Revision	Title	Pages
400866	12/06/2014	-	Main Assembly	1
400897	23/02/2018	-	Rescue ladder installation	1
401178	15/05/2019	A	RIBO 450 + motor	1
400515	11/07/2013	-	Low lifeline	1
400462	26/02/2015	A	Equipment bag	1
400475	02/09/2014	A	Reinforcing plate	1
400841	27/07/2015	E	Sling	1
400479	08/06/2015	B	Lifting sling position	1
400482	08/07/2013	-	Towing settings	1
400423	10/06/2013	-	Tube main assembly	1
401451	07/02/2018	-	Buoyancy volumes	1
400424	12/06/2013	-	Tube fitting positions	1
400400	22/05/2017	-	D ring 25mm patch	1
400472	03/07/2013	-	Retroreflective on hull	1
400478	09/07/2013	-	Righting bag assist	1
205585	06/11/2018	B	Righting tube 80L	1
400483	09/07/2013	-	Righting system bag	1
400593	23/07/2013	-	Righting lines pocket	1
400425	18/01/2018	A	Fixed bench	1
400426	18/01/2018	A	Movable bench	1
400728	11/01/2016	-	Electric diagram	1
400602	24/10/2017	A	Identification label	1
400506	22/01/2015	B	Label location	1
401178	15/05/2019	A	RIBO 450 + moteur	1

Reference Number	Date	Revision	Title	Pages
401511	01/08/2019	A	Main Assembly with console	1
A-500589	01/08/2019	F	Pilot console assembly	1

Calculation notes

Reference Number	Date	Revision	Title	Pages
RIBO 450-001	31/01/2018		Position of the Transom	1
RIBO 450-002	31/01/2018		Bow Cover	3

Structural Drawings

Reference Number	Date	Revision	Title	Pages
400495	11/07/2013	-	Hull lines	1
400502	11/07/2013	-	Hull lines section 0.5 to 3	1
400504	11/07/2013	-	Hull lines section 4 to 10	1
400489	10/07/2013	-	Hull cutting dimensions	1
400474	23/09/2015	A	Hull-Tube assembly	1
400487	10/07/2013	-	Wood cutting for hull	1
400488	10/07/2013	-	Wood deck reinforcement	1
401618	17/09/2020	A	Lower deck	9
401617	17/09/2020	B	Upper deck	11
401616	16/09/2020	B	Stratification hull and deck	1
400722	12/07/2013	-	Distribution buoyancy foam for RIBO 450	2
401447	31/01/2018	-	Engine plate	1
400637	31/01/2018	A	Damageable plate	1
400484	15/11/2019	D	Hull fitting layout	1

Materials and Components

Reference Number	Date	Revision	Title	Pages
D.I.F. RIBO EC	05/01/2023	S	Suppliers File RIBO EC	6

The rescue boat has various accessories as described in "Design report BF0852-EC".

Operating and maintenance manual

Reference Number	Issue	Title	Pages
Z63634	03/2013	RIBO 450 EC (Z340008)	116

No departure from these drawings is permitted without the prior consent of the Society.

3. TEST REPORTS:**Rescue Boat**

Date	Test Report
08/08/2008	IEN-05-08 Mooring out test
23/04/2009	BE049/2009 Prototype tests on serial number Proto 205
14/07/2009	IEN-06-09 Heavy weather test
13/03/2013	IEN 06-13 Overload strength test
24/01/2014	BE 003/2014 Additional tests on serial number XMP C232MA414
15/10/2014	BE 034/2014 Additional tests on serial number XMP C836N1415
15/01/2018	BE 001/2018 Additional tests (Benches)
30/11/2018	BE 047/2018 Additional tests (Console & Righting Bag)
17/12/2018	BE 059/2018 Additional tests (Mercury Engine 25 & 40 HP)
17/12/2018	BE 060/2018 Additional tests (Yamaha Engine 25 HP 4 strokes)
26/06/2019	BE 027/2019 Additional tests (Yamaha Engine 40 HP 4 strokes)

Laminate material of hull and rigid cover

Date	Test Report	
02/12/2019	002-2019/01 Rev. 1	Fire retardancy test, Flame resistance test & Strength test
28/06/2019	002-2019/01 Rev. 0	Strength test
05/11/2019	1873.1IS0025/19	Fire retardancy test
05/11/2019	1874.1IS0035/19	Flame resistance test
05/11/2019	1875.1IS0035/19	Flame resistance test
05/11/2019	1876.1IS0035/19	Flame resistance test

Inherent and additional buoyancy materials

Date	Test Report	
17/12/2008	LA 08 TLS 2317 P.V.	Initial test report
10/04/2012	R024-BNN-12-100094-1/A	Additional test report

Maximum towing forces

ENGINE TYPE	YAMAHA 25 HP - 4 strokes	YAMAHA 40 HP - 2 strokes	YAMAHA 40 HP - 4 strokes	MERCURY 25 HP - 2 strokes	MERCURY 40 HP - 2 strokes
Towing Force (Kg)	168	313	285.5	206	269
<i>Test Report</i>	BE 060/2018	BE 049/2009	BE 027/2019	BE 059/2018	BE 059/2018
<i>Forces measured with rescue boat serial number</i>	XDCDS041A C818	Proto 205	XDCDS041A C818	XDCDS041A C818	XDCDS041A C818

4. APPLICATION / LIMITATION:

- The scope of the appraisal made by Bureau Veritas to issue this certificate is strictly restricted to the relevant requirements stated on the front page of this certificate
- Application / limitation as per product description and requirements stated on front page of this certificate.
- The period of shelf life of equipment subjected to deterioration with age is to be indicated.
- On board installation & maintenance as per requirements stated on front page of this certificate.
- The following components shall have to comply with the requirements of MED 2014/90/EU, as amended, and be wheelmarked:

Propulsion Engines

ENGINE TYPE	YAMAHA 25 HP - 4 strokes	YAMAHA 40 HP - 2 strokes	YAMAHA 40 HP - 4 strokes	MERCURY 25 HP - 2 strokes	MERCURY 40 HP - 2 strokes
Type	25 HP F25G	40 VMHO SOLAS	40 HP F40F	25 HP	40 HP
Power	18.4 kW	29.4 kW	29.4 kW	18.4 kW	29.4 kW

Others

Designation	Additional Information
Release Mechanism: Position indicating lights Thermal protective aids Retro reflective materials Radar reflector Portable fire-extinguishing equipment Compass: Searchlight	with indication of SWL (to be not less than 950 kg) Artica 2"3/4 BA2 (Riviera Srl)

- Other rescue boat equipment as listed in LSA Code chapter 5.1.2.2, 5.1.2.3, 5.1.2.4, means for recharging searchlight batteries as per LSA Code chapter 4.4.6.11 and searchlight batteries is to be to the satisfaction of the ship's flag administration for acceptance of the equipped rescue boat on board the concerned ship.
- Electrical components including batteries to be as per documents and drawings listed in paragraph 2.

Fabric for inflated parts

Reference	Type	Manufacturer
Fabric	ORCA 866	Pennel & Flipo

Raw materials for the GRP Hull

Material	Type	Manufacturer
Gel Coat	UNIGEL 15M	Cromogenia-unit,S.A.
Resin	HETRON F 240 TF H 13239 TA	Ashland Polynt Composites
Mats	M705 Choped Strand Mat 3209 E-QX868	Owens corning
Woven Roving	600g/m ²	QUIMIDROGA
UD	Ruban 8002	Les Fils d'Auguste Chomarat et Cie
Buoyancy material	POL CX 25 STD Gris	Flexicel

5. PRODUCTION SURVEY REQUIREMENTS:

The raw materials are to be traceable in case of compatibility problems in repair.

5.1 - This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D Production Quality Assurance or module F Product Verification of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

5.2 - The manufacturer shall institute a quality control procedure to ensure that rescue boats are produced to the same standard as the approved prototype and shall keep records of any production tests carried out in accordance with instructions given in IMO Resolution MSC.81 (70) Part 2.

5.3 - Each rescue boat intended to be fitted onboard a ship registered to a National register adhering to the Directive shall be delivered with a Declaration of Conformity.

5.4 - Each equipment, or batch of equipment, is to be supplied with its Manual(s) for installation, use and maintenance.

6. MARKING OF PRODUCT:

The rigid/inflated rescue boat shall be marked with:

- Reference is made to MED 2014/90/EU chapter 2.
In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).
- Markings as per chapters 1.2, 4.4.1.2, 4.4.9 and 5.1.3.4 of the LSA Code as amended.

7. OTHERS:

It is **SURVITEC GROUP LIMITED'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.

This certificate supersedes the previous Type Examination Certificate No.22309/B2 MED issued on 30/03/2021 by the Society.

*** END OF CERTIFICATE ***