



Marine & Offshore

Certificate number: 07494/E0 BV

File number: LSA 6337/02

Product code: 6032H

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

TYPE APPROVAL CERTIFICATE

This certificate is issued to

C M HAMMAR AB

V:a Frölunda - SWEDEN

for the type of product

HYDROSTATIC RELEASE UNIT

Hydrostatic Release Unit, Type HAMMAR H20 & Hydrostatic/Electric Remote Release Unit, Type H20 ERU, for float-free arrangement of EPIRB's

Requirements:

SOLAS 74 Convention as amended, Regulations III/4, X/3, III/13, III/26 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) and MSC.368(93) I, IV

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) and MSC.378(93)

IMO MSC/Circ.811 and IMO MSC/Circ.980

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: 25 Jan 2023

For Bureau Veritas Marine & Offshore,

At BV GOTHENBURG, on 25 Jan 2018,

Magne MOLLER



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. 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 :

This version of the **HAMMAR H20** Hydrostatic Release Unit is intended for fitting Float-free arrangements of EPIRB's.

The version **HAMMAR H20-ERU** (Hydrostatic /Electric Release Unit) is intended for use together with an Electronic Remote Release system, designated under trade name "*Hammar ERRS*", i.e. EPIRB's can be released from one or more remote positions.

- The ERRS system is powered by the ship's Emergency Power Supply and by a back-up battery at every Control Panel.
- The ERRS system may be activated from one or several remote release positions.
- The ERRS system does not affect the hydrostatic function of the HAMMAR H20.
- Operational lifetime of a total of 24 months installed onboard.

The **HAMMAR H20**, which is part of the system, was separately approved in accordance with the European Council Directive 96/98/EC on Marine Equipment (M.E.D), as amended.

- It is not fitted with a manual operation device.
- It does not need to be periodically serviced (It is of "disposable sealed unit" type).
- It is set for release at a depth not less than 1.5 metres and not greater than 4 metres.
- It is not part of the painter system (It is not subjected to the painter system strength).
- Its Operational lifetime is set to a total of 24 months installed onboard.

2. DOCUMENTS AND DRAWINGS :

- Drawings and specifications:

Document	Issue	Date
CM HAMMAR AB - DRAWING AND SPECIFICATIONS	1	2012-05-25

- Manual(s) for installation use and maintenance.

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

3. TEST REPORTS :

As per test report listed in the following document:

Hydrostatic Realease Units

Number	Date	Description
85M51019	28/08/1985 29/08/1985	Type tests on the membranes
21.99-90 34084	24/01/1990	Corrosion tests on the blades
M51400	04/09/1990	Corrosion tests on the blades and HRU
	10/12/1993	Reassessed by the Swedish National Maritime Administration - Maritime Safety Inspectorate
KMyP203085b	2002/08/06	Type tests : Corrosion resistance, Temperature cycling, and release test
N° KMyP03765	2002/09/05	Type tests : Corrosion resistance, Temperature cycling, and release test
P801304	2008/03/13	Solar radiation test

Weak Link

Number	Date	Description
31.309.78.212	15/03/1985	Initial type tests
	2009/10/14	Weak link test

Plastic bolt

Number	Date	Description
90M10348	20/03/1991	Tensile strength of the plastic bolt

ERRS system

Number	Date	Description
02090P	08/11/2002	EMC tests
P206128 rev.1	24/02/2003	Type tests in accordance with EN 60945:1997
P206128-1	27/02/2003	Corrosion test

4. APPLICATION / LIMITATION :

- As per requirements stated on front page of this Certificate.
- The onboard installation and the maintenance of the Hydrostatic Release Unit shall be carried out according to manufacturer's instructions.
- It needs no annual service, maintenance or spare parts, but must be replaced after 24 months.
- It shall be provided with a simple system of recording the expiry date (month/year) at which the unit must be replaced.
- If marked with more than a single expiry date (month/year), the unit will be invalid and must be replaced.

5. PRODUCTION SURVEY REQUIREMENTS :

The **HAMMAR H20** Hydrostatic Release Unit and the **HAMMAR H20-ERU** are to be supplied by **CM HAMMAR AB** in compliance with the type described in this certificate.

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.

To be manufactured, checked for quality and tested in accordance with the protocol approved by Bureau Veritas on the basis of IMO Resolution MSC. 81(70), Part 2.

CM HAMMAR AB has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

For information, **CM HAMMAR AB** has declared to Bureau Veritas the following production site(s):

CM HAMMAR AB

August Barks Gata 15
S-42132 V:a Frölunda
SWEDEN

6. MARKING OF PRODUCT :

To be permanently marked on the unit or identification plate securely attached to the unit, as follows:

- "HAMMAR H20 E" or "HAMMAR H20 ERU E"
- Serial number.
- Expiry date.
- BV (SOLAS) approved.
- For EPIRB use only.
- The notation: "DO NOT PAINT".

7. OTHERS :

It is manufacturer'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 Type Approval Certificate N° 07494/D0 BV issued on 24/01/2013 by the Society.

*** END OF CERTIFICATE ***



MARINE DIVISION

Certificate number: 07493/E0 EC

File number: LSA 6337/01

Annex A1 Item number: A.1/1.16

USCG Module B number:
160.162 / EC0062

Notified Body 0062 - MARINE EQUIPMENT DIRECTIVE 96/98/EC

EC TYPE EXAMINATION CERTIFICATE

as per Module B of European Union Council Directive 96/98/EC on marine equipment
as amended by Commission Directive 2012/32/EU

This certificate is issued to

C M HAMMAR AB

V:a Frölunda - SWEDEN

for the type of product

FLOAT-FREE ARRANGEMENTS FOR LIFERAFTS (HYDROSTATIC RELEASE UNITS)

Types HAMMAR H20R & HAMMAR H20-ERU

Requirements:

SOLAS 74 Convention, as amended, Regulation III/4, X/3, III/13, III/26 and III/34

IMO Res. MSC.48(66) amended by MSC.207(81), MSC.218(82), MSC.272(85), MSC.293(87) & MSC.320(89)

IMO Res. MSC.36(63) 8 - IMO Res. MSC.97(73) 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)

IMO MSC/Circ.811 & IMO MSC/Circ.980

This certificate is issued under the French Maritime Authority to attest that BUREAU VERITAS did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Council Directive 96/98/EC of 20 December 1996 as amended.


This certificate will expire on: 24 Jan 2019

For BUREAU VERITAS Notified Body 0062,

At BV GOTHENBURG, on 24 Jan 2014,

Magne MOLLER



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 B 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. 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 is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. 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 :

This version of the **HAMMAR H20R** Hydrostatic Release Unit is intended for fitting Float-free arrangements for liferafts.

The version **HAMMAR H20-ERU** (Hydrostatic /Electric Release Unit) is intended for use together with an Electronic Remote Release system, designated under trade name "*Hammar ERRS*", i.e. liferafts can be launched from one or more remote positions.

- The ERRS system is powered by the ship's Emergency Power Supply and by a back-up battery at every Control Panel.
- The ERRS system may be activated from one or several remote release positions.
- The ERRS system does not affect the hydrostatic function of the HAMMAR H20.
- Operational lifetime of a total of 24 months installed onboard

This EC Type Examination Certificate only covers the hydrostatic function of the HRU version **HAMMAR H20**, as per requirements stated on front page of this certificate, and does not cover the additional ERRS system, although its design was assessed by the Society.

- It is not fitted with a manual operation device.
- It does not need to be periodically serviced (It is of "disposable sealed unit" type).
- Set for release at a depth not less than 1.5 metres and not greater than 4 metres.
- It is not part of the painter system (It is not subjected to the painter system strength).
- Its Operational lifetime is set to a total of 24 months installed onboard.

2. DOCUMENTS AND DRAWINGS :

- Drawings and specifications:

Document	Issue	Date
CM HAMMAR AB - DRAWING AND SPECIFICATIONS	1	2012-05-25

- Markings:

Document	Issue	Date
0001 Top Label	1	2014-01-15
0002 Expiry Label	1	2014-01-15

- Manual for installation, use and maintenance

Document	Issue	Date
HAMMAR H20 Manual HT-0019	08	2013

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

3. TEST REPORTS :

As per test report listed in the following document:

Hydrostatic Release Units

Number	Date	Description
31.309.78.212	01/03/1985	Initial Type Tests
31.309.78.212 Encl.	15/03/1985	Submergence Tests
31.309.78.212 Encl.	01/10/1985	Tests on Membranes
85M51019	28/08/1985	Type tests on the membranes
85M51019 Encl.2	28/08/1985	
85M51019 Encl.4	29/08/1985	
21.99-90 34084	24/01/1990	Corrosion tests on the blades
M51400	04/09/1990	Corrosion tests on the blades and HRU
	10/12/1993	Reassessed by the Swedish National Maritime Administration - Maritime Safety Inspectorate
KMyP203085b	06/08/2002	Type tests : Corrosion resistance, Temperature cycling, and release test
N° KMyP03765	05/09/2002	Type tests : Corrosion resistance, Temperature cycling, and release test
P801304	13/03/2008	Solar radiation test

Weak Link

Number	Date	Description
	14/10/2009	Weak link test

Rope Sling

Number	Date	Description
96H30094B	05/06/1996	Breaking Load test of rope Sling
KMpI-2013	28/10/2002	Breaking Load test of rope Sling

ERRS system

Number	Date	Description
02090P	08/11/2002	Additional tests of the ERRS
P206128 rev.1	24/02/2003	Environmental tests of the ERRS
P206128-1	27/02/2003	Corrosion test of the ERRS

4. APPLICATION / LIMITATION :

- As per requirements stated on front page of this Certificate.
- Where the weak link is part of the supply, it shall comply with items N° 20, 21 & 22 on drawing N° A0001070 Rev. 1.
- Since not submitted to the painter strain there is no limitation in respect to the liferaft capacity (the "Rope sling", which is part of the device was strength tested at 15 KN, liferaft for more than 25 persons)
- The onboard installation and the maintenance of the Hydrostatic Release Unit shall be carried out according to manufacturer's instructions.
- It needs no annual service, maintenance or spare parts, but must be replaced after two years.
- It shall be provided with a simple system of recording the expiry date (month/year) at which the unit must be replaced.
- If marked with more than a single expiry date (month/year), the unit will be invalid and must be replaced.

5. PRODUCTION SURVEY REQUIREMENTS :

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 E "Product Quality Assurance" or F "Product Verification" of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

For information concerning the production phase modules, **CM HAMMAR AB** has declared that the product may be manufactured

at the following manufacturing places :

CM HAMMAR AB
August Barks Gata 15
S-42132 V:a Frölunda
SWEDEN

6. MARKING OF PRODUCT :

To be permanently marked on the unit or identification plate securely attached to the unit, as follows:

- "HAMMAR H20 R" or "HAMMAR H20 ERU"
- Serial number
- Expiry date
- Markings as per MED 96/98/EC: ☒ YYYY/XX where YYYY is the number of the Notified Body undertaking surveillance module (where BV, 0062) and XX are the last two digits of year mark affixed.
- The notation: "DO NOT PAINT"

In pursuance of the EU/US MRA+, and in accordance with the Council Decision 2004/425/EC of 21 April 2004, the product(s) marked as per MED 96/98/EC may be marked with the USCG conformity marking as authorized by the Notified Body undertaking surveillance module.

7. OTHERS :

This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the HRU's at any time and that **CM HAMMAR AB**, Sweden will accept the responsibility for informing shipbuilders or their subcontractors of the proper methods of use and general maintenance of the equipment and the conditions of this approval.

This certificate supersedes EC Type Examination Certificate No 07493/D2 EC, issued on 04/12/2009 by the Society.

*** END OF CERTIFICATE ***



Marine & Offshore

Certificate number: 44656/A1 BV

File number: LSA 6337/01

Product code: 6030H

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

TYPE APPROVAL CERTIFICATE

This certificate is issued to

C M HAMMAR AB

V:a Frölunda - SWEDEN

for the type of product

HYDROSTATIC RELEASE UNITS FOR LIFERAFTS

Hammar H20 R & Hammar H20-ERU

Requirements:

SOLAS 74 Convention as amended, Regulations III/4, X/3, III/13.4.2, III/26.2.2 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) and MSC.425(98)

IMO MSC/Circ.811

IMO Resolution MSC.97(73) -(2000 HSC Code)- as amended, 8.1 and 8.6

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) and MSC.427(98)

TP 14612 & TP 14475

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: 10 Mar 2021

For Bureau Veritas Marine & Offshore,

At BV GOTHENBURG, on 19 Jun 2018,

Magne MOLLER



This certificate is recognized by Transport Canada



U. S. Department of Homeland Security
United States Coast Guard
Certificate of Approval

Coast Guard Approval Number: 160.062/14/0

Expires: 04 April 2022

HYDRAULIC RELEASE FOR LIFESAVING EQUIPMENT

Model H20 Small Raft (dark green label) hydrostatic release unit, with green plastic link for float-free liferaft installation, for release at water depths of not more than 4 meters.

Approved for non-SOLAS 4 person liferaft installations with painter attachment applications and break free force of 1.2 kN. Device intended for disposal 2 years after installation; not subject to annual testing. Production inspections conducted by the Swedish Maritime Safety Inspectorate; report of production tests and inspections in accordance with 46 CFR 159:007-11 due annually in July.

Identifying Data: C. M. Hammar AB assembly drawing A000200 (Rev. 2), with weak link green 1.2 kN drawing A000132; and associated approved drawings.

Approval valid only for equipment produced at the above location.

This initial certificate is issued based in part on tests and reports accepted for similar approved Hammar H20 models.

*** End ***

THIS IS TO CERTIFY THAT the above named manufacturer has submitted to the undersigned satisfactory evidence that the item specified herein complies with the applicable laws and regulations as outlined on the reverse side of this Certificate, and approval is hereby given. This approval shall be in effect until the expiration date hereon unless sooner canceled or suspended by proper authority.

GIVEN UNDER MY HAND THIS 04th DAY OF
APRIL 2017, AT WASHINGTON D.C.

B. A. BALDWIN
Chief, Lifesaving and Fire Safety Division
BY DIRECTION OF THE COMMANDANT



TERMS: The approval of the item described on the face of the Certificate has been based upon the submittal of satisfactory evidence that the item complies with the applicable provisions of the navigation and shipping laws and the applicable regulations in Title 33 and/or Title 46 of the Code of Federal Regulations. The approval is subject to any conditions noted on this Certificate and in the applicable laws and regulations governing the use of the item on vessels subject to Coast Guard inspection or on other vessels and boats.

Consideration will be given to an extension of this approval provided application is made 3 months prior to the expiration date of this Certificate.

The approval holder is responsible for making sure that the required inspections or tests of materials or devices covered by this approval are carried out during production as prescribed in the applicable regulations.

The approval of the item covered by this certificate is valid only so long as the item is manufactured in conformance with the details of the approved drawings, specifications, or other data referred to. No modification in the approved design, construction, or materials is to be adopted until the modification has been presented for consideration by the Commandant and confirmation received that the proposed alteration is acceptable.

NOTICE: Where a manufacturer of safety-at-sea equipment is offering for sale to the maritime industry, directly or indirectly, equipment represented to be approved, which fails to conform with either the design details or material specifications, or both, as approved by the Coast Guard, immediate action may be taken to invoke the various penalties and sanctions provided by law including prosecution under 46 U.S.C. 3318, which provides:

"A person that knowingly manufactures, sells, offers for sale, or possesses with intent to sell, any equipment subject to this part (*Part B. of Subtitle II of Title 46 U.S.C.*) and the equipment is so defective as to be insufficient to accomplish the purpose for which it is intended, shall be fined not more than \$10,000, imprisoned for not more than 5 years or both."