



Marine & Offshore

Attestation number: 00187GTB24

The continuation sheet(s) form(s) part of the attestation.

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ATTESTATION FOR RELEASE UNIT

Applicant : C M HAMMAR AB (V:a Frölunda - SWE)
Specifications : CM Hammars test procedure for lifebuoy release system

Product description : Lifebuoy release system
Quantity : 1 set

Particulars of products as declared by the applicant:

Manufacturer : C M HAMMAR AB (V:a Frölunda - SWE)
Type : HAMMAR LIFEBOUY RELEASE SYSTEM
Drawing number & revision : A001047 Rev. 2
Type Approval ERU : 07493/G0 MED
Type Approval ERU : 73672/B0 UK
Type Approval MRRS : 24437/C0 BV

Enclosures / Remarks :

At the request of the applicant identified here above, this is to attest that the interventions as described in the subsequent page(s) were carried out with satisfactory results and within the scope of the General Conditions of Bureau Veritas Marine & Offshore

Marking : Type
Last attendance date : 08 May 2024
Surveyor : Magne MOLLER

Issuance date : 26 Nov 2024
Office : BV GOTHENBURG

This attestation was created electronically and is valid without signature



This attestation 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 judgment, 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.

SCOPE OF INTERVENTION

Test Procedure:

The lifebuoy was released by the following methods:

- Manually by removing the locking pin.
- From a remote position by using a HAMMAR MRU release unit.
- From a remote position by using a HAMMAR ERU release unit.
- From a remote position by using a HAMMAR ERU release unit at 10° inclination inwards ship.

Temperature: Room temperature about 20-22°C.

Tests was witnessed to satisfaction.

TEST OF HAMMAR LIFEBOUY RELEASE SYSTEM

DESCRIPTION:

The HAMMAR LIFEBOUY RELEASE SYSTEM is a system designed for remote release of a lifebuoy from ship or vessel. The lifebuoy is placed in a holder on the bridge wing or at another suitable location onboard. The lifebuoy is restrained in its holder by a Polyester Silk rope. The rope is put under tension by the force from a strong spring.

The lifebuoy can be released by two different methods:

- Locally by manually removing a locking pin releasing the rope lashing for the lifebuoy.
- From a remote position by using HAMMAR MRU or a HAMMAR ERU. The HAMMAR release unit cuts the lashing rope for the lifebuoy.

Type approval for HAMMAR ERU, BUREAU VERITAS Certificate No: 07493/G0 MED, Attached to this document.

Type approval for HAMMAR ERU, BUREAU VERITAS Certificate No: 73672/B0 UK, Attached to this document.

Type approval for HAMMAR ERU, BUREAU VERITAS Certificate No: 24437/C0 BV Attached to this document.

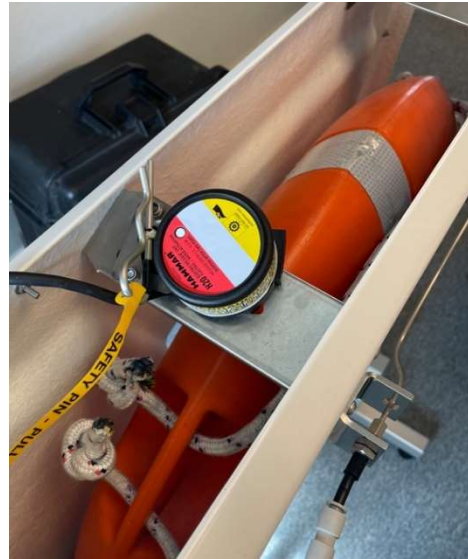
Drawing, LIFEBOUY RELEASE BRACKET, Draw. No A001047 – rev 2, Attached to this document.



LIFEBOUY RELEASE SYSTEM with ERU electric release unit



Detailed view of a MRU release unit



Detailed view of a ERU electronic unit



Detailed view of a ERU electronic unit at 10° inclination inwards

TEST PROCEDURE:

The lifebuoy was released by the following methods:

Manually by removing the locking pin.

From a remote position by using a HAMMAR MRU release unit.

From a remote position by using a HAMMAR ERU release unit.

From a remote position by using a HAMMAR ERU release unit at 10° inclination inwards ship.

Temperature: room temperature about 20 – 22 DegC.

RESULT:

The result of the test was satisfactory.

Witnessed in Gothenburg on 2024-05-08

Magne M



Signed by: Magne Møller
Marine Surveyor
Bureau Veritas, Marine Divison



Marine & Offshore

Certificate number: 07493/G0 MED

File number: LSA 6337/01

Item number: MED/1.16

USCG Module B number: 160.162 / EC2690

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) 2023/1667 of 8 Aug. 2023

This certificate is issued to:

C M HAMMAR AB

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

for the type of product

FLOAT-FREE ARRANGEMENTS FOR LIFERAFTS (HYDROSTATIC RELEASE UNITS)

H20 R, Release Depth 1.5-4m

In versions:

H20 R HRU, H20 RX HRU, H20 RL HRU

H20 R ERU, H20 RX ERU, H20 RL ERU

H20 R EBV, H20 RX EBV, H20 RL EBV

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), MSC.368(93), MSC.425(98), MSC.459(101) and MSC.485(103) 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),

MSC.378(93), MSC.427(98), MSC.472(101) and MSC.488(103)

IMO MSC/Circ.811 and IMO MSC.1/Circ.1630

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: 24 Jan 2029**For Bureau Veritas Marine & Offshore Notified Body 2690,**

At BV GOTHENBURG, on 24 Jan 2024,

Hans-erik ERICSSON

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 :

The **Hammar H20 Release Unit** is intended for cutting a rope/cable/tubing after impulse from a hydrostatic pressure to set free a vessel's life rafts or other Life Saving Appliances.

The mechanical principle of operation is a spring-loaded knife is held back by a pin fixed in the centre of a flexible membrane. Release of knife, activation, occurs when the flexible membrane is affected in a perpendicular direction from the spring-loaded knife.

Product Designation	H20 R, Release Depth 1.5 - 4 m
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Version	In-Service Options		
	H20 R (24 months)	H20 RX (30 months)	H20 RL (36 months)
H20 Hydrostatic Release Unit (HRU) *	H20 R HRU	H20 RX HRU	H20 RL HRU
H20 Hydrostatic/Electric Release Unit (ERU) **	H20 R ERU	H20 RX ERU	H20 RL ERU
H20 HRU with External Breather Valve (EBV) ***	H20 R EBV	H20 RX EBV	H20 RL EBV

* **HRU** have a hydrostatic activation depth of 1.5-4m.

** **ERU** activates on a hydrostatic pressure (at a depth of 1.5-4m) or on an electrical signal from a Control Unit. The electronic system, made by Hammar, set up for remotely activating ERU, is called Electronic Remote Release System (ERRS).

*** **EBV** have a hydrostatic activation depth of 1.5-4m.

This EC Type Examination Certificate only covers the hydrostatic function of the H20, as per requirements stated on the front page of this certificate, and does not cover the additional ERRS system, although its design was addressed by the Society to ensure that this additional feature would not impact the performance of the hydrostatic function of the H20.

The H20 is compatible with requirements in LSA 4.1.6.3:

- With the design of the H20 the force of the payload does not affect the release unit hence the marking (mentioned in LSA 4.1.6.3.6) of "suitable for life rafts with a capacity of more than 25 persons" applies to all H20 R Release Units.

2. DOCUMENTS AND DRAWINGS :

2.1 - Drawings and specifications

Document	Issue	Date
Drawings and Specifications	12	2023-12-20
H20 for liferafts scheme-A	R1	2023-10-12

2.2 - Markings

Document	Issue
Top Labels H20 R, 1.5-4m Release Depth	0010-01
H20 Expiry Label	0002-02

2.3 - Manual for installation, use and maintenance (Electronic format)

Document	Issue
HAMMAR H20 Manual HT-0019_11.05	11.05

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:

3.1 - Hydrostatic Release Units

REF	DESCRIPTION	ID	Date
1	Test report for Hydrostatic Release Unit (HRU), Sjöfartsinspektionen, IMO A521(13)	31-309.78.212	01/03/1985
1	<i>Submergence test</i>	31-309.78.212 Encl 3	15/03/1985
1	<i>Corrosion resistance test</i>	85M51019 Encl 2	28/08/1985
1	<i>Technical test on membranes</i>	85M51019 Encl 4	29/08/1985
1	<i>Technical tests on membrane</i>	31-309.78.212 Encl 5	01/10/1985
2	Corrosion tests on the blades	21.99-90 34084	24/01/1990
3	Corrosion tests on the blades and HRU	M51400	04/09/1990
4	Letter Swedish National Maritime Administration Safety Inspectorate	---	10/12/1993
6	Type tests: Corrosion resistance, temperature cycling, and release test	KMyP203085b	06/08/2002
7	Type tests: Corrosion resistance, temperature cycling, and release test	N KMyP03765	05/09/2002
9	Solar radiation test	P801304	13/03/2008
10	H20 X, Disposable Hydrostatic release unit test	---	22/06/2009
12	H20 RX with external breather valve, Disposable Hydrostatic release unit	---	28/02/2012
13	Corrosion resistance test of knife sets	8P03320-01	09/04/2018
14	Type tests: H20RL Temperature cycling and release test	169GTB19	26/04/2019

3.2 - Weak Link

REF	DESCRIPTION	ID	Date
1	Test of Weak links	31-309.78.212 Encl12	01/10/1985
11	Weak link test	---	14/10/2009
17	Testing of Weak Links F214946	F214946	05/09/2002
18	Testing of Weak Links (Red)	82369-10	09/05/2023
15	Additional Material test BG30 tensile test	23-0541	09/05/2023

3.3 - Rope Sling

REF	DESCRIPTION	ID	Date
5	Breaking load test of rope sling	96H30094B	05/06/1996
8	Breaking load test of rope sling	KMp I2013	28/10/2002
14	Strength test of the rope slings fishermans knot (Black)	169GTB19	26/04/2019

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° 4 or 8 on drawing H20 for liferafts scheme-A-R1.
- 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 out according to manufacturer's instructions.
- 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.
- In addition of the Electronic version of the "manual for installation, use and maintenance", a paper version of the manual should always be available free of charge for the consumers who request it.

5. PRODUCTION SURVEY REQUIREMENTS :

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 E Product 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 - For information concerning the production phase modules, **CM HAMMAR AB** has declared the following manufacturing 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"
- Serial number
- Expiry date
- The notation: "DO NOT PAINT"

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).

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 2014/90/EU may be marked with the USCG conformity marking as authorized by the Notified Body undertaking surveillance module.

7. OTHERS :

It is **CM HAMMAR AB** 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 EC Type Examination Certificate No 07493/F0 MED, issued on 17/12/2018 by the Society.

*** END OF CERTIFICATE ***



UK Approved Body Authorised
by the MCA

Certificate number: 73672/B0 UK

File number: LSA 6337/01

Item number: UK/1.16

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

Approved Body 8517 - UNITED KINGDOM MARINE EQUIPMENT APPROVAL

UK TYPE-EXAMINATION (MODULE B) CERTIFICATE

This is to certify that Bureau Veritas SA UK Branch Office did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, subject to any conditions in the schedule attached hereto.

This certificate is issued to:

C M HAMMAR AB

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

for the type of product

FLOAT-FREE ARRANGEMENTS FOR LIFERAFTS (HYDROSTATIC RELEASE UNITS)

H20 R, Release Depth 1.5-4m

In versions:

H20 R HRU, H20 RX HRU, H20 RL HRU

H20 R ERU, H20 RX ERU, H20 RL ERU

H20 R EBV, H20 RX EBV, H20 RL EBV

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), MSC.368(93), MSC.425(98), MSC.459(101) and MSC.485(103) 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), MSC.378(93), MSC.427(98), MSC.472(101) and MSC.488(103)

IMO MSC/Circ.811 and IMO MSC.1/Circ.1630

The attached (schedule of approval) forms part of this certificate.

This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.

This certificate will expire on: 20 Nov 2029

Issued by Bureau Veritas SA UK Branch Office

(Approved Body 8517)

At BV GOTHENBURG, on 20 Nov 2024,

Hans-erik ERICSSON

This certificate was created electronically and is valid without signature



Note 1: This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

Note 2: During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

Note 3: "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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body."

Note 4: In case limitations of use apply, these should be indicated in the Annex.

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 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 :

The **Hammar H20 Release Unit** is intended for cutting a rope/cable/tubing after impulse from a hydrostatic pressure to set free a vessel's life rafts or other Life Saving Appliances.

The mechanical principle of operation is a spring-loaded knife is held back by a pin fixed in the centre of a flexible membrane. Release of knife, activation, occurs when the flexible membrane is affected in a perpendicular direction from the spring-loaded knife.

Product Designation	H20 R, Release Depth 1.5-4 m		
Version	In-Service Options		
	H20 R (24 months)	H20 RX (30 months)	H20 RL (36 months)
H20 Hydrostatic Release Unit (HRU) *	H20 R HRU	H20 RX HRU	H20 RL HRU
H20 Hydrostatic/Electric Release Unit (ERU) **	H20 R ERU	H20 RX ERU	H20 RL ERU
H20 HRU with External Breather Valve (EBV) ***	H20 R EBV	H20 RX EBV	H20 RL EBV

* **HRU** have a hydrostatic activation depth of 1.5-4m.

** **ERU** activates on a hydrostatic pressure (at a depth of 1.5-4m) or on an electrical signal from a Control Unit. The electronic system, made by Hammar, set up for remotely activating ERU, is called Electronic Remote Release System (ERRS).

*** **EBV** have a hydrostatic activation depth of 1.5-4m.

This UK Type Examination Certificate only covers the hydrostatic function of the H20, as per requirements stated on the front page of this certificate, and does not cover the additional ERRS system, although its design was addressed by the Society to ensure that this additional feature would not impact the performance of the hydrostatic function of the H20.

The H20 is compatible with requirements in LSA 4.1.6.3:

- With the design of the H20 the force of the payload does not affect the release unit hence the marking (mentioned in LSA 4.1.6.3.6) of "suitable for life rafts with a capacity of more than 25 persons" applies to all H20 R Release Units.

2. DOCUMENTS AND DRAWINGS :

2.1 - Drawings and Specifications

Document	Issue	Date
Drawings and Specifications	12	2023-12-20
H20 for liferafts scheme-A	R1	2023-10-12

2.2 - Markings

Document	Issue
Top Labels H20 R, 1.5-4m Release Depth	0010-01
H20 Expiry Label	0002-02

2.3 - Manual for installation, use and maintenance (Electronic format)

Document	Issue
HAMMAR H20 Manual HT-0019_11.05	11.05

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:

3.1 - Hydrostatic Release Units

REF	DESCRIPTION	ID	DATE
1	Test report for Hydrostatic Release Unit (HRU), Sjöfartsinspektionen, IMO A521(13)	31.309.78.212	01/03/1985
1	<i>Submergence test</i>	31-309.78.212 Encl 3	15/03/1985
1	<i>Corrosion resistance test</i>	85M51019 Encl 2	28/08/1985
1	<i>Technical test on membranes</i>	85M51019 Encl 4	29/08/1985
1	<i>Technical test on membranes</i>	31-309.78.212 Encl 5	01/10/1985
2	Corrosion tests on the blades	21.99-90 34084	24/01/1990
3	Corrosion tests on the blades and HRU	M51400	04/09/1990
4	Letter Swedish National Maritime Administration Safety Inspectorate	---	10/12/1993
6	Type tests: Corrosion resistance, temperature cycling, and release test	KMyP203085b	06/08/2002
7	Type tests: Corrosion resistance, temperature cycling, and release test	N KMyP03765	05/09/2002
9	Solar radiation test	P801304	13/03/2008
10	H20 X, Disposable Hydrostatic release unit test	---	22/06/2009
12	H20 RX with external breather valve, Disposable Hydrostatic release unit	---	28/02/2012
13	Corrosion resistance test of knife sets	8P03320-01	09/04/2018
14	Type tests: H20RL Temperature cycling and release test	169GTB19	26/04/2019

3.2 - Weak Link

REF	DESCRIPTION	ID	DATE
1	Test of Weak links	31-309.78.212 Encl12	01/10/1985
11	Weak link test	---	14/10/2009
17	Testing of Weak Links F214946	F214946	05/09/2002
18	Testing of Weak Links (Red)	82369-10	09/05/2023
15	Additional Material test BG30 tensile test	23-0541	09/05/2023

3.3 - Rope Sling

REF	DESCRIPTION	ID	DATE
5	Breaking load test of rope sling	96H30094B	05/06/1996
8	Breaking load test of rope sling	KMp I2013	28/10/2002
14	Strength test of the rope slings fishermans knot (Black)	169GTB19	26/04/2019

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° 4 or 8 on drawing H20 for liferafts scheme-A-R1.
- 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 out according to manufacturer's instructions.
- 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.
- In addition of the electronic version of the "manual for installation, use and maintenance", a paper version of the manual should always be available free of charge for the consumers who request it.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - This certificate alone does not allow the applicant to issue the UK Declaration of Conformity and to affix the mark of conformity (United Kingdom conformity mark) to the products corresponding to this type. To this end, the production-control phase module D Production Quality Assurance or module E Product Quality Assurance or module F Product Verification of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, is to be complied with and controlled by a written inspection agreement with an Approved Body.

5.2 - For information concerning the production phase modules, **CM HAMMAR AB** has declared the following manufacturing 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"
- Serial number
- Expiry date
- The notation: "DO NOT PAINT"

Reference is made to the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, Part3:

In particular Article 15.3 specifies that the United Kingdom conformity mark shall be followed by the identification number of the Approved 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).

7. OTHERS :

It is **CM HAMMAR AB** 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 UK Type-Examination Certificate No 73672/A0 UK, issued on 17/11/2022 by the Society.

*** END OF CERTIFICATE ***



Marine & Offshore

Certificate number: 24437/C0 BV

File number: LSA 6337/03

Product code: 6043H

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

C M HAMMAR AB

V:a Frölunda - SWEDEN

for the type of product

MANUAL RELEASE SYSTEM

Manual Remote Release System (MRRS)

Manual Remote Release System (MRRSX)

Requirements:

Chapter 1.2 General requirements for life-saving appliances of the LSA Code

IMO Resolution MSC.48(66) as 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, IV

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: 07 Jun 2027

For Bureau Veritas Marine & Offshore,

At BV GOTHENBURG, on 07 Jun 2022,

Torbjorn Ygesjo

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.

The electronic version is available at: <https://www.veristarm.com/veristarnb/jsp/viewPublicPdfTypec.jsp?id=rrzbcuqw7o>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Hammar Remote Release System (MRRS) and (MRRSX) are designed to release heavy loads with little effort. By means of a vacuum pump, which is operated manually, the vacuum is conveyed via stainless steel tubing to a release unit. A membrane is activated, releasing a sharp knife of stainless steel which cuts the rope sling holding the object to be released.

The **MRRS** and **MRRSX** are to be used for remote release of inflatable liferafts.

The **MRRS** and **MRRSX** can be associated with an H2O Hydrostatic Release System without interfering with the Hydrostatic Release system when installed onboard as per the manufacturer's recommendation.

The **MRRS** and **MRRSX** can not be installed instead of a Hydrostatic Release System when a HRU is required.

The **MRRS** and **MRRSX** does not need to be periodically serviced (it is of disposable sealed unit type).

TYPE	Operational lifetime of a total of
MRRS	24 months installed onboard
MRRSX	30 months installed onboard

2. DOCUMENTS AND DRAWINGS :

- Drawings and specifications:

Document	Issue	Date
CM HAMMAR AB - DRAWING AND SPECIFICATIONS	9	2020-01-28

- 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 reports listed in the following document:

Hydrostatic Release Units

Number	Date	Description
31.309.78.212	15/03/1985	Initial type tests
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
96H30094B	05/06/1995	Breaking load test of rope sling with fisherman's knot
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
KMp I-2013	2002/10/28	Strength test of the rope slings, liferaft for more than 25 persons
P801304	2008/03/13	Solar radiation test
8P03320-01	09/04/2018	Corrosion test of knife sets

Weak Links

Number	Date	Description
---	14/10/2009	Weak link test

MRRS System

Number	Date	Made by
21.11.9272854	24/02/1993	Swedish National Maritime Administration
MS 3/14/0869	11/05/1993	Department of Transport

4. APPLICATION / LIMITATION:

- As per requirements stated on front page of this certificate.
- 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 Hammar Manual Remote Release Systems(MRRS) and (MRRSX) shall be carried out according to manufacturer's instructions:
- The MRRS and MRRSX needs no annual service, maintenance, or spare parts, but must be replaced after 24 or 20 months installed onboard:

TYPE	Operational lifetime of a total of
MRRS	24 months installed onboard
MRRSX	30 months installed onboard

- 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:

5.1 - The Hammar Manual Remote Release Systems (MRRS) and (MRRSX) are to be supplied by **CM HAMMAR AB** 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 - **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.

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

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

6. MARKING OF PRODUCT :

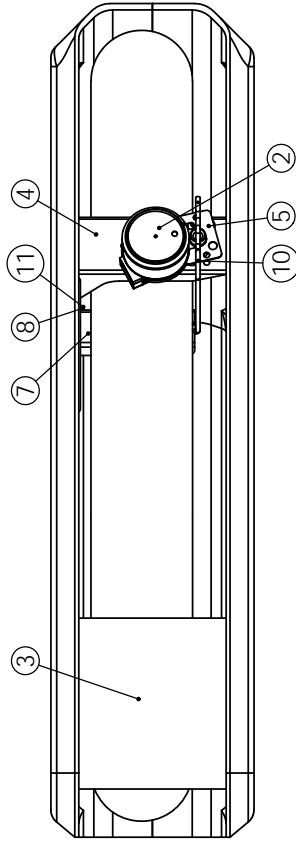
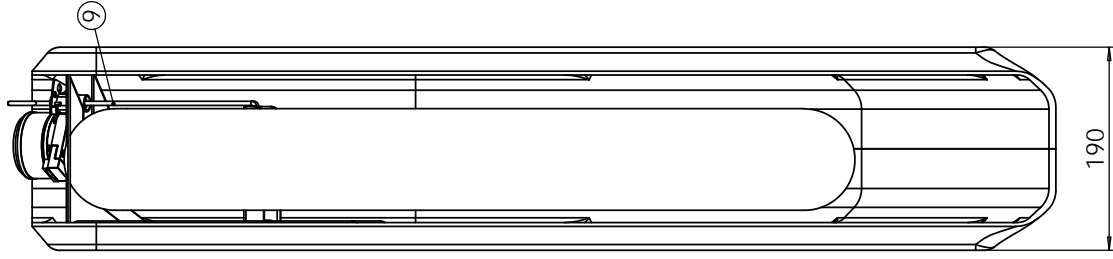
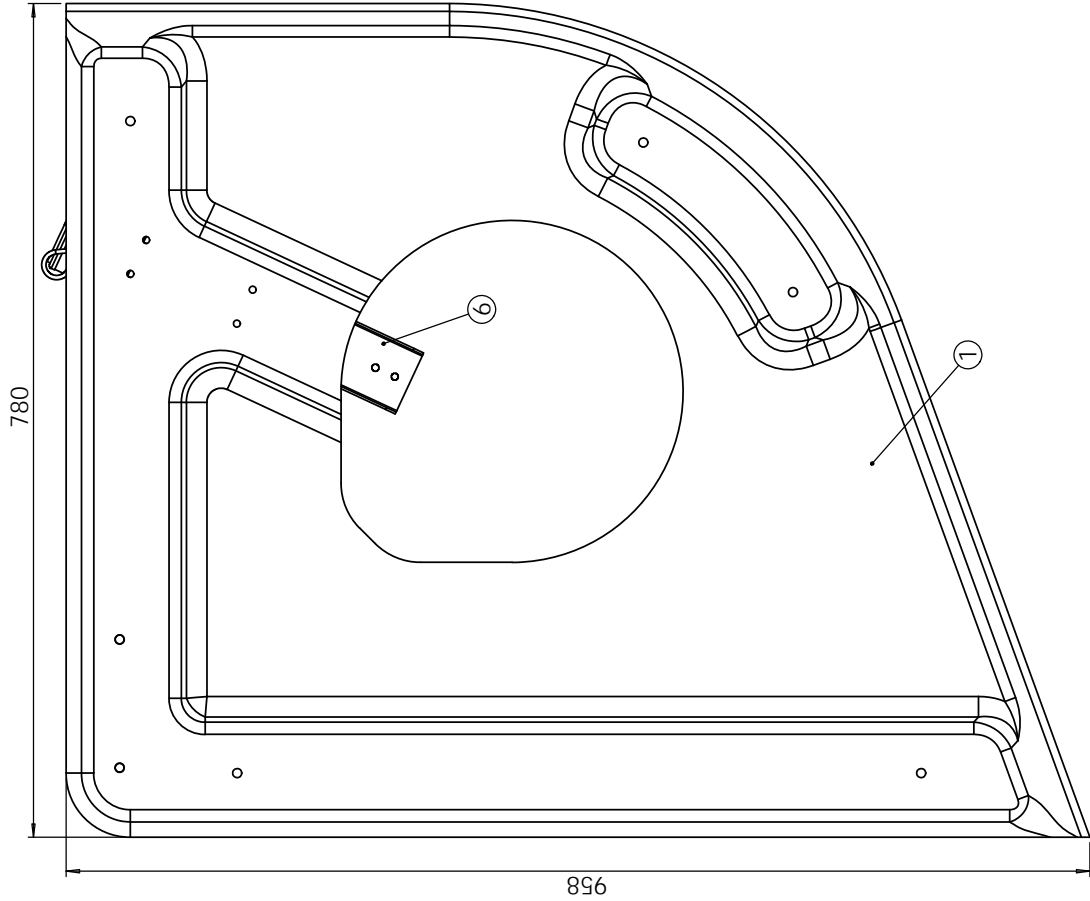
- Hammar Remote Release System (MRRS) or Hammar Remote Release System (MRRSX)
- Serial number
- Expiry date
- The notation: "DO NOT PAINT"

7. OTHERS :

It is **CM HAMMAR AB** 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 Type Approval Certificate No 24437/B2 BV issued on 11/03/2020 by the Society.

*** END OF CERTIFICATE ***



Item:	Part No:	DESCRIPTION	CNT
1	A001046	Life buoy holder	1
2	A001073	Release unit ERU	1
or	A001075	Release unit ERUX	1
or	A001079	Release unit RRU	1
or	A001076	Release unit MRUX	1
3	P001127	Bracket	1
4	P001137	Top bracket	1
5	P001032	Washer release unit	1
6	P001138	Side bracket	1
7	P001130	Arm	1
8	P001131	Spring	1
9	E000036	Rope	1
10	E000037	Release pin	1
11	E000038	Shaft	1

Det.	Number/ant.	Designation/benamn.	Material	Notes/noteringar
TC	TC	TC	1:5	14-01-2011
Drawn/Ritad	Checked/Kontr.	Appr./Godkänd	Scale/Skala	Date/Datum: (dd-mm-yyyy)
CM HAMMAR AB		LIFEBUOY RELEASE SYSTEM	Repl./Ersätter:	Draw. No./Ritn.nr. A001047
Tel.: +46 31 709 65 50 Fax.: +46 31 49 70 23				Rev.: 2
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