



Marine & Offshore

Certificate number: 24437/B2 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

HAMMAR 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) and MSC.459(101)

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: 15 Mar 2022

For Bureau Veritas Marine & Offshore,

At BV GOTHENBURG, on 11 Mar 2020,

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. 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.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

The **Hammar Remote Release System (MRRSX)** is 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 **MRRSX** can be associated with an H20 Hydrostatic Release System without interfering with the Hydrostatic Release system when installed onboard as per the manufacturer's recommendation.

The **MRRSX** can not be installed instead of a Hydrostatic Release System.

Operational lifetime of a total of 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 :

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

- Further technical assessments:

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 (MRRSX) shall be carried out according to manufacturer's instructions.
- Operational lifetime of a total of 30 months installed onboard.
- 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 (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.

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.

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 MRRSX
- Serial number
- Expiry date

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/B1 BV issued on 19/06/2018 by the Society.

***** END OF CERTIFICATE *****