

Marine & Offshore Division Certificate number: 43683/A0 EC File number: NAV18/104256/1

Annex A1 Item number: A.1/4.6

USCG Module B number: 165.107 / EC0062 This certificate is not valid when presented without the full attached schedule composed of 7 sections www.veristar.com

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 (EU) 2015/559

This certificate is issued to

Northern Solution AS

Vinterbro - NORWAY

for the type of product

ECHO-SOUNDING EQUIPMENT

EMES60 ECHO SOUNDER

Requirements:

SOLAS 74 Convention as amended, Regulations V/18, V/19 and X/3 IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 13 IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 13 IMO Res. A.224(VII) IMO Res. A.694(17) IMO Res. MSC.74(69) amended by MSC.115(73), Annex 4 IMO Res. MSC.191(79) ISO 9875:2000 incl. /Corr.1:2006 IEC 60945 Ed. 4.0 (2002) incl. /Corr.1 (2008) IEC 61162-1 Ed. 4.0 (2010) including IEC 61162-1 Corrigendum 1 (2013) IEC 62288 Ed. 2.0 (2014)

This certificate is issued on behalf of the French Maritime Authorities 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: 28 Jun 2021

For BUREAU VERITAS Notified Body 0062, At BV OSLO, on 28 Jun 2016, Rune MARSTEIN

Rune Marstein



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. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division 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 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:

EMES60 ECHO SOUNDER

1.1 - Parts of the System

EMES60 Sensor EMES60 Sensor Power Unit EMES60 Dual Interface Unit EMES60 Display Unit

1.2 - System Power Requirement

Mains Nominal: 115V to 230V:103.5V to 242V, 47.5Hz to 63Hz DC Nominal: 24V: 21.5V to 31V Power: 6 W, HMI units: 12.8W maximum each.

1.3 - Software versions

EMES60 Sensor: SW version 01.01.0x EMES60 Dual Interface: SW version 01.01.0x EMES60 Display Unit: SW version 01.01.1x

2. DOCUMENTS AND DRAWINGS:

Documents and drawings submitted are listed in Northern Solutions AS, file LIST OF DOCUMENTS SUBMITTED FOR EMES60 TYPE APPROVALS Ref: EMES60_TA_DOCL Rev_13052016 dated 13.05.2016.

<u>3. TEST REPORTS:</u>

Test Reports submitted are listed in Northern Solutions AS, file LIST OF DOCUMENTS SUBMITTED FOR EMES60 TYPE APPROVALS Ref: EMES60_TA_DOCL Rev_13052016 dated 13.05.2016.

4. APPLICATION / LIMITATION:

As per requirements of regulations stated on the front page of the certificate and according to the manufacturer's specifications.

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.

<u>6. MARKING OF PRODUCT:</u>

- 6.1 Maker's name or trade mark,
 - Serial number of the units,
 - Equipment type number or model identification under which it was type-tested,
 - Compass minimum safe distance according to IEC 60945.

6.2 - Markings as per MED 96/98/EC when authorized by a Notified Body:

X YYYY/XX where YYYY is the number of the Notified Body undertaking surveillance module (when BV, 0062) and where

XX are the last two digits of year mark affixed.

7. OTHERS:

It is **Northern Solutions AS**'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.

*** END OF CERTIFICATE ***