

EC Certificate Type Examination (Module B)



This is to certify that:

Germanischer Lloyd, a Notified Body under the terms of the Marine Equipment Directive 96/98/EC of 20 December 1996, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 96/98/EC as amended, subject to any conditions in the schedule attached hereto.

Certificate No.	86 949 - 10 HH
Applicant	SPDE 'Musson-Morsviaz-Servis' Vakulenchuk Str. 29 99053 Sevastopol, Crimea, UKRAINE
Manufacturer	SPDE 'Musson-Morsviaz-Servis' Vakulenchuk Str. 29 99053 Sevastopol, Crimea, UKRAINE
Product Description	9-GHz-Radartransponder (SART)
Product Name	Course
Trade Name	Course
Specified Standards	IMO Res. A.530(13), A.802(19) amended by MSC.247(83), A.694(17); IEC 60945 (2002) / EN 60945 (2002), IEC 61097-1 (2007) / EN 61097-1 (2007); ITU-R M.628-4 (03/06).
Related Directive	2008/67/EC
Equipment Section	Navigation equipment
Annex A.1 Item No.	A.1/4.18
Date of Issue	2010-02-23
Expiry Date	2015-02-22

Germanischer Lloyd




Matthias Wiese

Notified Body No.: 0098

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Certificate No: 86 949 - 10 HH Date of Issue: 2010-02-23

Schedule of Approval

Approval Documentation

Test report PE TC Omega no. 09/590.
Owner's Manual, Version 2, 21.12.09.
Assembly drawing AMXA.464419.001SB.

Technical Data

Frequency band: 9,200 MHz – 9,500 MHz
Polarization: horizontal
Effective emitting power: 400 mW e.i.r.p. (+ 26 dB)
Effective receiver sensitivity: minus 50 dBm (0.1 mW/m²)
Power supply: 6.3 V DC – 7.7 V DC
Battery type: ER34615M - 3.6 V lithium batteries (Li-SOCI2)

Remarks

Requirements of Directive 2009/26/EC are fulfilled.

Limitations on the acceptance or use of the product

None

Notes:

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform Germanischer Lloyd, as the Notified Body, of any modifications or changes to the approved equipment.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body.

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EC Certificate of Conformity Quality System (Module D)



Germanischer Lloyd as the notified body performing the quality assessment procedures certifies that the manufacturer maintains and applies a quality system which is in compliance with the requirements of the Marine Equipment Directive (MED) 96/98/EC, as amended, ensuring that the equipment identified below is conform to the type as described in the EC Type Examination Certificate, subject to any conditions in the schedule attached hereto.

Certificate No. 86 950 - 10 HH
Manufacturer SPDE 'Musson-Morsviaz-Servis'
Vakulenchuk Str. 29
99053 Sevastopol, Crimea, UKRAINE

Product Description 9-GHz-Radartransponder (SART)
Product Name Course
Trade Name Course

EC Type Examination
Certificate No. 86 949 - 10 HH
Date of Issue 2010-02-23
Valid Until 2015-02-22
Notified Body ID No. 0098

Related Directive 2008/67/EC
Equipment Section Navigation equipment
Annex A.1 Item No. A.1/4.18

Date of Issue 2010-02-23
Expiry Date 2015-02-22

Germanischer Lloyd



Matthias Wiese

Notified Body No.: 0098



Certificate No: 86 950 - 10 HH Date of Issue: 2010-02-23

Schedule of Approval

Remarks

None

Notes:

This certificate authorises the manufacturer in conjunction with the EC Type Examination (Module B) Certificate of the equipment listed before to affix the Mark of Conformity (wheelmark) to the product described herein.

This certificate loses its validity if the manufacturer makes any changes or modifications to the approved quality system, which have not been notified to, and agreed with the notified body named on this certificate and/or after lapse of time, withdrawal or revocation of the EC Type Examination (Module B) Certificate.

Wheelmark Format and application:



0098/yy

0098
yy

Notified Body number undertaking quality surveillance
Last two digits of year in which the mark is affixed