DNV·GL

Certificate No:
MEDB00003HT

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Track control system (TCS)

with type designation(s)
ECPINS TCS

Issued to
OSI Maritime Systems Ltd.
Burnaby, BC, Canada

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
item No. MED/4.33. SOLAS 74 as amended, Regulations V/18 & V/19, IMO Res A.694(17), IMO Res MSC.74(69), IMO Res MSC.191(79), IMO Res MSC.302(87)

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2021-03-11**.

Issued at **Hamburg** on **2019-07-03**

DNV GL local station:
Vancouver

Approval Engineer:
Harald Bluhm

Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudszus
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

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. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
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.

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Product description

The ECPINS Track Control System in conjunction with its sources of position, heading and speed information fulfils the requirements for full control on straight legs and turns (Category C) and consists of the following equipment:

Raytheon Anschütz Heading Control System (HCS) Type: NautoPilot 5400
Operator Unit: 102-890NGxxx with Software Version: 102-890 P0001 E03.xx
Autopilot Interface Unit 102-891NG001 with Software Version: 102-891 P0001 E01.xx

and
Electronic Chart Display and Information System ECPINS with Software Version ECPINS 6.1.x or 6.2.x

ECPINS Processor unit, 3U-Core 2 Duo	Part No. A-120XXX or
ECPINS Processor unit, Core i7	Part No. A-122XXX or
ECPINS Processor unit, Core i3, 4U	Part No. A-123XXX or
ECPINS Processor unit, Core2 Duo, Fanless	Part No. A-124XXX or
ECPINS Processor unit, Core i7	Part No. A-126XXX or
ECPINS Processor unit, Core i7, Fanless	Part No. A-127XXX or
ECPINS Processor unit, Core i7	Part No. A-128XXX
ECPINS Processor unit, Core i7	Part No. A-129XXX

Note: XXX Versions with different drives, buzzer and / or memory

Serial Expansion Unit, 8 port	Part No. A-300093 or A-300245 or
NavTac DDU, sensor distribution	Part No. A-300150 or A-150XXX

Note: XXX Versions with different number and type of serial & network interfaces

and optional
UPS & Power Distribution Panel Part No. A-300094 & A-300095 or A-300196

Documentation :
ECPINS 6.2 Technican Guide A-900511, Operator's Manual A-900503, A-900505, A-900506, Modules Operator's Manual A-900507, A-900509, A-900510
ECPINS 6.1 Technican Guide A-900178, Operator's Manual A-900168, A-900170, A-900171

Type Examination documentation

Tests carried out

IEC 62065 (2014)
IEC60945(2002), incl.corr.1(2008)
IEC 62288 (2014)
IEC 61162 series:
- IEC 61162-1 (2016)
- IEC 61162-2 (1998)
- IEC 61162-450 (2011) incl. am1 (2016).

Marking of product

According to IEC 60945, Sect.4.9:
The product to be marked with following information, where practicable:

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start - up, and in case of fixed equipment compass safe distance may be given in the equipment manual.

Job Id: **344.1-007687-7**
Certificate No: **MEDB00003HT**

According to Article 10 of the Council Directive (MED):

- Wheel mark to be affixed visibly, legibly and indelibly to the product or to its data plate and, where relevant, embedded in its software. Where that is not possible or not warranted on account of the nature of the product, it shall be affixed to the packaging and to the accompanying documents.
- Wheel mark to be affixed at the end of the production phase.

For specific products, manufacturers may use an appropriate and reliable form of electronic tag instead of, or in addition to, the wheel mark.
END OF CERTIFICATE