DNV·GL

Certificate No:
MEDB000023U

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 Integrated navigation system (INS)

with type designation(s)
HLD-INS 600

Issued to
Beijing Highlander Digital Technology Co., LTD
Beijing, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
item No. MED/4.58. SOLAS 74 as amended, Regulations V/15, V/18, V/19 & X/3, IMO Res. A.694(17), IMO Res. MSC.36(63), IMO Res. MSC.97(73), IMO Res. MSC.191(79), IMO Res. MSC.252(83), IMO Res. MSC.302(87)
Manufacturers authorised representative
Rockson Automation GmbH
Kiel, Germany

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

This Certificate is valid until **2022-06-21**.

Issued at **Hamburg** on **2017-06-22**

DNV GL local station:
Tianjin

Approval Engineer:
Harald Bluhm

Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudszus
Head of Notified Body

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

1. Product Type: HLD-INS 600

Comprising of:
2. Main Control Unit (Computer): HLD-MCU 200, or HLD-MCU 600
Software: Windows7 Operating System

3. Display Units:
Monitor TFT 24", Type: HLD-DU134, or, HLD-DU140, or, HLD-DU150
Monitor TFT 26", Type: HLD-DU135, or, HLD-DU141, or, HLD-DU151

4. Power Conversion Unit: HLD-PCU600

5. Human Interface Unit: HLD-IU600

6. Lan Switch: HLD-LS600

7. Signal Convert Unit: HLD-SCU600

Additional equipment:
8. UPS
UPS (SURT1000 XLIM) Type: PC SMART-UPS RT 1000VA 230V
UPS (SURTD2200 XLIM) Type: APC SMART-UPS RT 2200VA 230V
EMC Filter (SURT023M) Type: SURT023M-APC 3000VA FILTER

Manuals:
HLD-INS 600 USER MANUAL HLD5100YH Rev 2.0
HLD-INS 600 INSTALLATION MANUAL HLD5100AZ Rev 1.1
HLD-INS 600 SERVICE MANUAL HLD5100FW Rev 1.0
HLD-ECDIS 600 OPERATION MANUAL HLD3400CZ Rev 1.0
HLD-ECDIS 600 INSTALLATION MANUAL HLD3400AZ Rev 1.0
HLD-RADAR 900 OPERATION MANUAL HLD1800Rev Rev 1.1
HLD-RADAR 900 INSTALLATION MANUAL HLD1800AZ Rev 1.0
HLD-TCS 600 OPERATION MANUAL HLD0800CZ Rev 1.0
HLD-SC 600 OPERATION MANUAL HLD0700CZ, Rev.1.0

Type Examination documentation

Tests carried out

IEC 60945 (2002) incl. IEC 60945 Corr. 1 (2008), IEC 61162 series: IEC 61162-1 ed5.0 (2016-08), IEC 61162-2 ed1.0 (1998-09), IEC 61162-450 ed1.0 (2011-06), IEC 61924-2 (2012), IEC 62288 Ed. 2.0 (2014-07).

Marking of product

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

- The wheel mark shall 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.
- The wheel mark shall be affixed at the end of the production phase.
- The wheel mark shall be followed by the identification number of the notified body, where that body is involved in the production control phase, and by the year in which the mark is affixed.

- The identification number of the notified body shall be affixed by the body itself or, under its instructions, by the manufacturer or the manufacturer's authorised representative.

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