

EC CERTIFICATE TYPE EXAMINATION (MODULE B)

DNV·GL

This is to certify that:

DNV GL SE, a Notified Body under the terms of the Marine Equipment Directive 96/98/EC of 20 December 1996, notified by the German Federal Ministry of Transport, Building and Urban Development, 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.	12 578 - 10 HH
Applicant	Beijing Highlander Digital Technology Co., Ltd. Tsinghua Science Park C 1902, Haidian District 100084 Beijing, P.R. CHINA
Manufacturer	Beijing Highlander Digital Technology Co., Ltd Qingfeng Road 199, Sutong Sci&Tech Park Nantong, CHINA
Product Description	Heading Control System (HCS)
Product Name	HLD-SC200
Trade Name	HLD-SC200
Specified Standards	-IMO Resolutions A.342 (IX), A.694 (17), MSC.64(67) Annex 3, MSC.191(79) -ISO 11674 (2006) , IEC 61162-1(Ed.4), IEC 60945 (2002) incl. Corr.1 (2008), IEC62288(2014)
Related Directive	2014/93/EU
Equipment Section	Navigation equipment
Annex A.1 Item No.	A.1/4.16
Date of Re-issue	2016-01-25
Expiry Date	2020-12-20

DNV GL SE

Notified Body No.: 0098




Christine Mydlak-Röder

Certificate No: 12 578 - 10 HH

Date of Re-issue: 2016-01-25

Schedule of Approval

Approval Documentation

Test report : HLD-SC200 GL Test (7 November 2010), A10-024-ZC-01, HLD121223

Technical Data

The PID-controlled heading control system HLD-SC200 consists of the following equipment necessary for functioning:

Operation Unit:	P/N: 0501001A0
Automatic Control Unit:	P/N: 0501011A0
Steering Interface Unit:	P/N: 0501013A0
Rudder Feedback Unit:	P/N: 0505000A0
With Lever Drive System	P/N: 0503000A0
Power Supply Unit:	P/N: 0501016A0

Optional equipment:	
Steering Mode Switch:	P/N: 0501002A0
Alarm Control Unit:	P/N: 0501012A0
Alarm Display Unit:	P/N: 0501005A0
Extended Alarm Display Panel:	P/N: 0501009A0

Additional equipment

For a complete steering gear control system the following components may be used:

Follow-Up Unit:	P/N: 0501003A0
Non-Follow-Up Unit:	P/N: 0501010A0
Steering Interface Unit:	P/N: 0501013A0
Override Unit:	P/N: 0501007A0
Relay:	P/N: 0501014A0
Wing Non-Follow-Up Unit:	P/N: 0502000A0
Connection Terminals:	P/N: 0501015A0
Rudder Pump System Switch:	P/N: 0501004A0
Local/Bridge Steering Switch:	P/N: 0504000A0
Steering Repeater Compass:	P/N: 0501008A0

To be used with compasses providing data in compliance with IEC 61162-1 and IEC 61162-2

Documentation:	
Installation Manual:	HLD0500AZ V1.x
Operation Manual:	HLD0500SS2 V1.x
Service Manual:	HLD0500WC V1.x

Remarks

None

Notes:

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

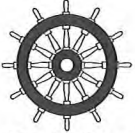
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

An 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

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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.

Limitations on the acceptance or use of the product

none

EC CERTIFICATE OF CONFORMITY QUALITY SYSTEM (MODULE D)

DNV·GL

DNV GL SE as the notified body, notified by the German Federal Ministry of Transport, Building and Urban Development, 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 annex attached hereto.

Certificate No. **12 579 - 10 HH**

Manufacturer **Beijing Highlander Digital Technology Co., Ltd**
Qingfeng Road 199, Sutong Sci&Tech Park
Nantong, CHINA

Scope:

A.1/4.16 Heading control system (HCS)

Related Directive **2014/93/EU**

Date of Re-issue **2016-01-25**

Expiry Date **2020-02-20**

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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.

The manufacturer is allowed to affix the U.S. Coast Guard approval number(s) as stated in the annex attached hereto and 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.

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

Annex to
Certificate No: 12 579 - 10 HH

Date of Re-issue: 2016-01-25

Item	Item Description			
	Product Name			
	Trade Name			
	Module B No.	Date of issue	Date of expiry	Notified Body
	USCG Approval No.			
	Comment to USCG Approval (if applicable)			
A.1/4.16	Heading control system (HCS)			
	HLD-SC200			
	HLD-SC200			
	12 578 - 10 HH	2016-01-25	2020-12-20	0098
	165.110 / EC 0098 / 1257810			
none				