DNV·GL

Certificate No:
TAA00000SV

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Automatic Telephone System

with type designation(s)
HX-120

Issued to
HANSHIN ELECTRONICS CO.,LTD.
Busan, Republic of Korea

is found to comply with
IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids
IEC 60945 Ed. 4 (2002-08) Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results
DNV GL rules for classification – Ships

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2021-09-27**.

Issued at **Busan** on **2016-09-28**

for **DNV GL**

DNV GL local station: **Busan**

Approval Engineer: **Kwang Whan Cho**

Baeg Soon Choi
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Job Id: **262.1-021167-1**
Certificate No: **TAA00000SV**

Product description

Automatic telephone exchanger, HX-120, consists of following component

Part Name	Description	Software version	Location
HX-120	Auto exchanger	Main V.001.x	Protected

Application/Limitation

- HX-120 shall be installed and verified in accordance with Operation & Installation Manual.
- HX-120 shall be placed more than 5 meter away from magnetic compass.

Type Approval documentation

DNVGL No.	Document No.	Revision	Document title
23	HS-TEX120-110426	1.0a	Performance Test Report
21	-	-	Declaration of conformity
19	E168R-D082	Initial	Electromagnetic Compatibility Test Report
18			Environmental Test Report
16	HS-TEX120-151118	1.0b	Circuit Drawing
15	HS-TEX120-15111901	1.0b	Operation & Installation Manual

Tests carried out

- Environmental test: IEC60945 (2002)
- Performance test: Functional test according to DNV Type Approval Program 848.25

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

A retention survey is to be performed at least once every second year, and again upon renewal of this certificate. The scope o the retention/renewal survey is to verify that production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.