

TYPE APPROVAL CERTIFICATE

This is to certify:

That the General Alarm System

with type designation(s)
KG-JK

Issued to

Jiaxing Kexun Electron Co., Ltd.
Jiaxing, China

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft

Application :

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

Temperature A (*D)

Humidity B

Vibration A

EMC B

Enclosure Required protection according to DNV GL Rules shall be provided upon installation on board

This Certificate is valid until **2021-11-30**.

Issued at **Hamburg** on **2016-12-01**

DNV GL local station: **Shanghai CMC**

for **DNV GL**

Approval Engineer: **Didier Girardin**

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Duy Nam Le
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.

Product description

General Emergency Alarm System	Component Type
Alarm Controller:	KG-1JK, KG-2JK, KG-3JK
Alarm Bell Control Box:	KY-1A, KY-1B, KY-1C
Alarm Remote Control Box:	KG-1JYG, KG-3JYG, KG-1JYF (*), KG-3JYF (*)
Alarm Button:	AN-2, AN-3 (*)
Audible and Visual Alarm Unit:	BJ-1, BJ-2J (*), BJ-2Z (*), BJ-3, BJ-4J, BJ-4Z, BJ-5J (*), BJ-5Z (*)

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV GL, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to Statutory Interpretation DNVGL-SI-0364 Section 4

The following documentation is to be submitted for approval in each case:

- Reference to this Type Approval Certificate
- Reference to valid Type Approval Certificate for hardware if different than listed under Product description
- Electrical schematic drawing
- Functional description
- Arrangement plan including information providing location of centrals, activation points and all loudspeakers and bells.

GA System may be used in cargo ships, passenger vessels, high-speed & light craft and mobile offshore units in compliance with the following codes/rules/regulations:

- SOLAS
- HSC Code
- MODU Code
- DNV Statutory Interpretations.

Limitation is provided for passenger vessel in case of integrated PA/GA system where installation is not covered by present certificate.

PA/GA Integrated system

When the PA system is integrated with Fire Alarm and/or General Alarm System, then duplication and segregation requirements will apply ref IMO Res. A.1021(26) and DNV Approval program 848.22, as amended.

Each delivery of the integrated PA/GA system **is to be certified** according to DNVGL-SI-0364. The certification test is to be performed at the manufacturer of the application system before the system is shipped to the yard. The test shall be done according to an approved test program. After the certification the clause for application software control will be put into force. Clause for application software control All changes in software are to be recorded as long as the system is in use on board. The records of all changes are to be forwarded to DNV for evaluation and approval. Major changes in the software are to be approved before being installed in the computer.

Tests carried out

- Environmental testing: Guidelines for the Performance of Type Approvals Chapter 2, Edition 2003

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



Job Id:
Certificate No: **TAA00000VE**

A retention survey is to be performed at least once every second year, and again upon renewal of this certificate. The scope of the retention/renewal survey is to verify that the 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.