

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Fire Alarm Central Unit**

with type designation(s)

FAC513/553 - Fire Alarm Panel**FIR523/563 - Remote Annunciator**

Issued to

Nohmi Bosai Ltd.**Chiyoda-ku, Tokyo, Japan**

is found to comply with

DNV GL rules for classification – Ships and offshore units**Application :****Location classes:****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

Temperature	A
Humidity	B
Vibration	A
EMC	B
Enclosure	A

This Certificate is valid until **2020-12-31**.Issued at **Busan** on **2016-04-04**for **DNV GL**DNV GL local station: **Yokohama**Approval Engineer: **Byoung So Lee**

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.

Product description

Equipment	Type	Mounting	SW Version
Analogue, Addressable Fire Detection and Alarm Panel	FAC513	Exposed	MCU:2.00
	FAC553	Concealed	SCU:2.00
Remote Annunciator Panel	FIR523	Exposed	1.01
	FIR563	Concealed	

- Software MCU: 2.00 and SCU:2.00 adapt "Code of Fire Safety System Chapter 9". The automatic reset function of detector isolation (30min/60min/90min) is added.

Application/Limitation

System application and location of loop equipment to be in accordance with relevant parts of the Rules.

FIR523/563 is approved as indicating unit only.

Type Approval conditions

Instruction Manual covering each specific installation to be available on board.

The following documentation of the actual application is to be submitted for approval in each case:

- Reference to this Type Approval Certificate
- System block diagram including location of loop equipment.
- Power supply arrangement (may be part of the System block diagram)

The Type Approval covers hardware and software listed under Product description.

As long as the units are covered by the Type Approval, no Product certificate will be required according to Pt.4 Ch.9 Sec.1 A 202.

Type Approval documentation

Tests carried out

Relevant tests according to "Standard for Certification No. 2.4 – April 2001"

Periodical assessment

The scope of the retention/renewal survey is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems/components/materials.

The main elements of the survey are:

- Inspection of factory samples, selected at random from the production line (where practicable)

Job Id: **262.1-002531-5**
Certificate No: **TAA00000D6**

- Review of production and inspection routines, including test records from product sample tests and control routines.
- Ensuring that systems/components/materials used comply with type approved documents and/or referenced system/component/material specifications.
- Review of possible changes in design of systems/components/materials, software version and performance, and make sure that such changes do not affect the type approval given.
- Ensuring traceability between manufacturer's product type marking and the type approval certificate.
- Ensuring that type approved documentation is available.

Retention survey is to be performed at least every second year and at renewal of this certificate.

END OF CERTIFICATE