

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Fire door control systems (components)

with type designation(s)
HBI 100 EL

Issued to

Baggerød AS
HORTEN, Norway

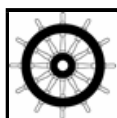
is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397**,
item No. MED/3.17. SOLAS 74 as amended, Regulation II-2/9 & X/3, 2000 HSC Code 7 and
IMO 2010 FTP Code

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

This Certificate is valid until **2025-06-01**.

Issued at **Høvik** on **2020-06-02**

DNV GL local station:
Norway Fleet in Service, East-South



for **DNV GL AS**

Approval Engineer:
Marcin Tobiasz

Notified Body
No.: **0575**

Roald Vårheim
Head of Notified Body

A 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 by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd, 2019.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

"HBI 100 EL"

is an electrical sliding fire door control system consisting of an electrically driven closing mechanism for use with a sliding door.

Main system components are: locking assembly with belt drive, electrical motor, high temperature junction box, high temperature battery box, two limit switches, two temperature sensors, sounder and interconnecting wiring.

The high temperature junction box contains the controls of the system (I/O controller and motor controller) as well as the UPS and PSU. The high temperature battery box contains a battery. Both the battery box and the control box are insulated with filler plates of material 1200 kg/m³ and the part of the box door within the box frame is insulated with rubber gasket.

External dimensions of high temp junction box: 196mm x 177mm x 484mm (Width x Height x Depth)

External dimensions of high temp battery box: 176mm x 142mm x 434mm (Width x Height x Depth)

For further details, see the drawings referred to under Type Examination documentation below.

Application/Limitation

Approved for use as a fire door control system for approved fire sliding door.

The fire door control system has only been evaluated with respect to fire technical properties.

Maximum weight of door leaf to be actuated by this control system: 500 kg.

The fire door control system is to be installed and tested in accordance with SOLAS II-2/9.4.1.1.4 or HSC Code 7.9.3.3.

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

The product is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Test Report No. 150080-13 dated 16 August 2018 from RISE Fire Research AS, Trondheim, Norway.

Drawing no. 10050566, "System drawing HBI 100 EL", dated 17 December 2018 from IMS Technologies AS, Akland, Norway.

Drawing no. 10048764 "High Temp junction box", dated 02 July 2018/ 18 December 2018 from IMS Technologies AS, Akland, Norway.

Drawing no. 10049433 "High temperature Battery Box", dated 03 July 2018/ 18.12.2018 from IMS Technologies AS, Akland, Norway.

Tests carried out

Tested according to IMO 2010 FTP Code Part 4.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, MED Mark of Conformity and USCG approval number if applicable (see first page).