

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Fire Technical Ancillary Equipment**with type designation(s)
DBS720, FDS221R/W, FDS229A/R, FDSB29x

Issued to

Siemens Schweiz AG
Zug, Switzerland

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 B****Humidity B****Vibration A****EMC A****Enclosure Required protection according to the Rules shall be provided upon installation on board.**Issued at **Hamburg** on **2018-03-26**This Certificate is valid until **2023-03-25**.for **DNV GL**DNV GL local station: **Augsburg**Approval Engineer: **Heinz Scheffler**

Joannis Papanuskas
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

Fire Alarm Devices - Addressable Sounders:

- FDSB291; Sounder base
- FDS221R; FDS221W; Alarm Sounders
- FDS229R; FDS229A: Alarm Sounder Beacons
- FDB221 and seal FDBZ295 Detector base addressable
 - For use on the addressable CNET of CerberusPRO® fire control panels FC722-ZA ; FC722-ZE; FC724-ZA;FC724-ZE or on the addressable FD-Net of AlgoRex® CS1140
- DBS720: Sounder base
 - Fire Alarm Device with DBx: For use only on the addressable CNET of CerberusPRO® fire control panels FC722-ZA ; FC722-ZE; FC724-ZA;FC724-ZE or on addressable FD-Net of Sinteso® fire control panels FC2020-AA, FC2020-AE, FC2040-AA, FC2040-AE

Application/Limitation

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNVGL, 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 DNVGL Rules for Ships Pt.4 Ch.9 Control and Monitoring Systems.

Type Approval documentation

Test Reports and Documents: DNVGL_Documentation_Reports_2018-02-26

Tests carried out

Applicable tests according to Class Guidance DNVGL-CG-0339, November 2016.

EN 54-3 (2001) to A2 (2006); IEC 60092-504 (2001) including IEC 60092-504 Corrigendum 1 (2011); IEC 60533 (1999)

Marking of product

The products to be marked with:

- Manufacturer name
- Model name
- Serial No.

Periodical assessment

The scope of the periodical assessment 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, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or 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.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE