

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Fire Detector

with type designation(s)
711P, 711PH, 711H, 712H, 713H

Issued to

Tyco Fire & Security GmbH
Neuhausen am Rheinfall, SH, 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.

Location classes:

Temperature D
Humidity B
Vibration A
EMC B
Enclosure B; 711H, 712H, 713H tested to IP55

Issued at **Høvik** on **2021-02-11**

This Certificate is valid until **2026-02-10**.

DNV GL local station: **Southampton**

for **DNV GL**

Approval Engineer: **Nils Jarem**

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Marta Alonso Pontes
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.

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

700 series smoke detectors

711P Conventional optical smoke detector
711PH Conventional optical smoke detector with heat enhancement
711H Conventional heat detector, rate of rise (A1R)
712H Conventional heat detector, fixed 60°C (A1S)
713H Conventional heat detector, fixed 90°C (CS)

- 711P operates by sensing the optical scatter from smoke particles generated in a fire.
- 711PH operates by sensing the optical scatter from smoke particles generated in a fire, and a rapid rate of rising temperature increases the smoke detection sensitivity.
- 711H uses both rate-of-rise and fixed temperature sensing. The 711H is a category A1R heat detector. A1 denotes a static response temperature of 54°C to 65°C (EN54-5). The suffix R denotes a rate-of-rise characteristic, but the fixed element provides a backstop for fires where the temperature builds up gradually.
- 712H uses fixed temperature sensing. The 712H is a category A1S heat detector. A1 denotes a static response temperature of 54°C to 65°C (EN54-5). The suffix S denotes that the detector does not respond at a lower temperature, even at high rates of rising air temperature.
- 713H uses fixed temperature sensing. It is a category CS heat detector. C denotes a static response temperature of 84°C to 100°C (EN54-5). The suffix S denotes that the detector does not respond at a lower temperature, even at high rates of rising air temperature.

Base

The 700 series conventional detectors are plug-in detectors for ceiling mounting. The detectors plug into a 4B Base or a 4B-D Conventional Diode Base. Also, the detectors are compatible with the legacy 5B Base and 5BD Diode Continuity Base.

Place of manufacture

Tyco Fire & Security Czech Republic s.r.o.
Osvobození 363,
Ráječko, 679 02 Rájec – Jestřebí
Czech Republic

Approval conditions

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 DNV GL rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

Type Approval documentation

Job Id: **262.1-035025-1**
Certificate No: **TAA00002Y8**

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, December 2019.

Applicable tests according to EN 54-29:2015, EN 54-5:2017 + A1:2018 and EN 54-7:2018.

Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

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