

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Fire Detector

with type designation(s)

ALN-ENM, ACC-ENM, ATJ-ENM, YBN-R/3M, YBO-R/SCIM, YBN-R/3(SCI)M, CHQ-DRC/M(SCI), CHQ-DRC2/M(SCI), CHQ-DIM/M(SCI), CHQ-DIM2/M(SCI), CHQ-DSC/M(SCI), CHQ-DSC2/M(SCI), CHQ-SZM/M(SCI), CHQ-SZM2/M(SCI), CHQ-DZM/M(SCI), CHQ-DZM2/M(SCI)-IS, CHQ-SIM/M

Issued to

**Hochiki Europe (UK) Ltd.
Gillingham KE, United Kingdom**

is found to comply with

DNV GL rules for classification – Ships

Application :

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

Temperature	B
Humidity	A
Vibration	A
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

This Certificate is valid until **2019-07-09**.

Issued at **Hamburg** on **2016-04-07**

DNV GL local station: **Southampton**

Approval Engineer: **Heinz Scheffler**

for **DNV GL**

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

Heat Detector

ATJ-ENM: Combined Rate of Rise & Fixed Temperature Heat Detector (Class A1)

ACC-ENM: Temperature Heat Multi Detector (Class A1)

Optical Smoke Detector

ACC-ENM: Optical Smoke Multi-Detector

ALN-ENM: Optical Smoke Detector

Compatible Base for ATJ-ENM, ACC-ENM, ACC-ENM and ALN-ENM

YBN-R/3M: Electronics Free Mounting Base

YBN-R/3(SCI)M: Addressable Short Circuit Isolator Base

YBO/SCIM: Short Circuit Isolator Base

MBB-1/2: Marine Back Box

Short circuit isolator

YBO-R/SCIM: Addressable Short Circuit Isolator Base

YBN-R/3(SCI)M: Addressable Short Circuit Isolator Base

Input / Output Device

CHQ-DRC/M(SCI) / -DRC2/M(SCI): Analogue Dual Relay Controller (with Isolator)

CHQ-DIM/M(SCI) / -DIM2/M(SCI): Analogue Dual Input Module (with Isolator)

CHQ-DSC/M(SCI) / -DSC2/M(SCI): Analogue Dual Sounder Controller (with Isolator)

CHQ-SZM/M(SCI) / -SZM2/M(SCI): Analogue Single Zone Module (with Isolator)

CHQ-DZM/M(SCI): Analogue Dual Zone Monitor (with Isolator)

CHQ-DZM/M(SCI)-IS: I.S. Compatible Dual Zone Monitor (with Isolator)

CHQ-SIM/M: Single Input Module

Application/Limitation

CHQ-DZM/M(SCI)-IS should only be installed in the safe area.

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

Test Repots ;: TE280668; TE270508; TE282478; TE289409; TE277796-SW-A; TE270507; TE270507-SW; TE280860; TE270508-SW; TE243064; TE 241495; TE 235000; TE 235000-1; TE277796; 277796-SW-B Amendment 1; 101978111LHD-002c; 101978111LHD-012; 101978111LHD-013; 101978111LHD-002b; TE243066-SW; TE243066; TE243127-Revision 2; 101978111LHD-011; 101978111LHD-002a; 243127-SW,TE283696; TE283696; TE 251144; TE 251144-SW; 1002287604LHD-011; 1002287604LHD-012; 1002287604LHD-013; 1002287604LHD-014; 102287604LHD-002a; 102287604LHD-002b; 102287604LHD-002c;102287604LHD-002c; SW-P101540-1001; TE-P101540-1001; TE-P100108-1001; TE-P100108-1001-SW

Documents : 2-1-2-088 YBO-RSCI PCB ASSEMBLY, 7-0-000-2439-726 ACC-E ElectricalComponentList, 7-0-000-2454-725 ATJ-E Electrical Component List, 1426010-00 YBN-R3 GENERAL ASSEMBLY DRG, 1226110-00 YBO-RSCI GENERAL ASSEMBLY, ATJ-EN Document List, ALN-EN Document List, CHQ-SZM-M(SCI) Document List ; CHQ-DIM-M(SCI) Document List, CHQ-DSC-M(SCI) Document List ; CHQ-DRC-M(SCI) Document List ; 1433450-00 CHQ-DZM(SCI) ASSEMBLY DRAWING & CIRCUIT DIAGRAM, 1433460-00 CHQ-DZM(SCI)-IS ASSEMBLY DRAWING & CIRCUIT DIAGRAM, 1433640-00 CHQ-SIM ASSEMBLY DRAWING ; 2-3-0-1730/ISS3/MAR16 CHQ Output MODULES INSTALLATION INSTRUCTIONS; 2-3-0-1731/ISS3/MAR16 CHQ Input MODULES INSTALLATION INSTRUCTIONS; QCF136 Component List CHQ-SZM2(SCI) / CHQ-DSC2(SCI) / CHQ-DIM2(SCI) / List CHQ-DRC2(SCI)

Job Id: **262.1-022209-1**
Certificate No: **TAA00000DJ**

Tests carried out

Applicable tests according to class guideline DNVGL-CG-0339, November 2015.
EN 54-5 (2000) incl. A1, EN 54-7 (2000) incl. A1+A2, EN 54-17/18 (2005) including AC(2007), IEC 60092-504 (2001) including IEC 60092- 504 Corrigendum 1 (2011).

Marking of product

The products to be marked with:

- model name
- manufacturer name
- serial number

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 at least every second year and at renewal of this certificate.

END OF CERTIFICATE