



**BUREAU
VERITAS**

*Marine & Offshore
Division*

Certificate number: 43303/A0 EC

File number: AP 4651

Annex A1 Item number: A.1/3.51.a

*This certificate is not valid when presented without the full
attached schedule composed of 7 sections*

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Notified Body 0062 - MARINE EQUIPMENT DIRECTIVE 96/98/EC

EC TYPE EXAMINATION CERTIFICATE

*as per Module B of European Union Council Directive 96/98/EC on marine equipment
as amended by Commission Directive 2014/93/EU*

This certificate is issued to

MARINELEC TECHNOLOGIES

Quimper - FRANCE

for the type of product

**FIXED FIRE DETECTION AND FIRE ALARM SYSTEMS COMPONENTS [...] -
CONTROL AND INDICATING EQUIPMENT**

Conventional Fire detection panel DI09

Requirements:

SOLAS 74 convention as amended, Regulations II-2/7, X/3, Reg. II-2/7.2.2, Reg. II-2/7.4, Reg. II 2/7.4.1

IMO Res. MSC.36(63) -(1994 HSC Code)- as amended, 7

IMO Res. MSC.97(73) -(2000 HSC Code)- as amended, 7

IMO Res. MSC.98(73)-(FSS Code)- as amended, 9

IMO MSC.1/Circ.1242

EN 54-2 (1997) incl. /AC (1999) & /A1 (2006).

IEC 60092-504 Ed. 3.0 (2001) incl. /Corr.1 (2011)

IEC 60533 (2015)

This certificate is issued on behalf of the French Maritime Authorities to attest that BUREAU VERITAS did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Council Directive 96/98/EC of 20 December 1996 as amended.


This certificate will expire on: 10 Dec 2020

For BUREAU VERITAS Notified Body 0062,

At BV NANTES, on 10 Dec 2015,

Joel Gaurin



This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark ) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. BUREAU VERITAS is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

- Product model or type designation:

DI09

- Product description:

Conventional fire detection panel

POWER SUPPLY	: 24VDC (main) + 24VDC (emergency)
THIRD SOURCE	: 12VDC with supplied cell (1 x MN21)
DETECTION CAPACITY	: 4 zones
ZONE CAPACITY	: 1 to 10 detectors per section (total detectors: 40)
MAX. CABLE LENGTH	: 300 meters
ASSOCIATED STANDARD DETECTORS	: optical smoke detectors : heat detector (55°C, 65°C or 80°C maxi., static of rate of rise) : multisensor (combination of optical smoke and heat detector) : manual call point (IP 53)
ASSOCIATED I.S. DETECTORS	: optical smoke detectors : heat detector (50°C, 65°C, 80°C, static or rate of rise) : wheatherproof intrinsically safe manual call point (IP 65) : General Alarm control
« EXTERNAL SIREN » OUTPUT	: 24V, 200mA max, to transfer the audible signal of the C.I.E.
« FIRE » OUTPUT	: normally open dry contacts, not monitored, (0.35A max, not protected), programmable
« FAULT » OUTPUT	: normally closed dry contacts, not monitored, (0.35A max, not protected), programmable
« RS485 » OUTPUT	: programmable protocol: V.D.R. (NMEA 0.183 sentences (IEC 61162-120)), modbus
« GENERAL ALARM » OUTPUT	: normally open dry contact, not monitored, (0.35A max, not protected), which allows to make general alarm signal (7 short pulses, 1 long pulse) every minutes.
DISPLAY	: LEDs + graphic backlighted LCD (8*20 characters)
PROTECTION	: IP22
SOFTWARE VERSION	: V1.00, dated Jan 15, 2010

2. DOCUMENTS AND DRAWINGS :

From **MARINELEC**:

- User Manual No. DI09_MANUEL_GB REV0, dated 07/06/2010.
- Datasheet No. DI09 FP GB REV 0, dated 24/02/2010.
- Software documentation No. DI09_SOFTWARE_DOCUMENTATION_Rev 0, dated Jun 2010.
- Electronic Diagrams No. DI09_REV4.1, dated 18/03/2010.
- Case Drawing REV0, dated Aug 2009
- Cover Drawing REV0, dated Aug 2009
- Principle Drawing REV0, dated Aug 2009
- Front Face FR-GB REV0, dated June 03, 2010
- Front Face ES-GB REV0, dated June 03, 2010
- DI09 - GAP ANALYSIS 01- IEC 60533 2015 ENG, dated 19/10/2015

3. TEST REPORTS :

Issued by **LCIE**:

Enclosure Test Report No.99406-597339, dated May 12, 2010

Issued by **KENTA**:

EMC Report No. 203 929, dated Apr 2010.

Issued by **MARINELEC**:

Functional Test Reports according to EN 54-2 No. DI09_EN54_CONFORMITY_TEST_REPORT Rev 1, dated Feb 19, 2010.

4. APPLICATION / LIMITATION :

- 4.1 - As per Requirements of Regulations stated on the front page of this certificate.
- 4.2 - The equipment fulfils the EMC requirements for installation on the Bridge and Deck Zone.
- 4.3 - The equipment is not to be fitted in hazardous areas.
- 4.4 - Prior to fit on board, assessment of compatibility or connectability with fire alarm unit is to be performed.
- 4.5 - Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.

5. PRODUCTION SURVEY REQUIREMENTS :

This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or E "Product Quality Assurance" or F "Product Verification" of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.

6. MARKING OF PRODUCT :

Markings as per MED 96/98/EC:

☒ YYYY/XX where YYYY is the number of the Notified Body undertaking surveillance module (when BV, 0062) and where XX are the last two digits of year mark affixed.

7. OTHERS :

This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that: **MARINELEC TECHNOLOGIES - 13 Rue Alfred Le Bars - 29000 QUIMPER - FRANCE** will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.

*** END OF CERTIFICATE ***