

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: MERB000085K **Revision No:** 0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Fire alarm devices - Sounders

with type designation(s) Audio and Audio Visual Warning Signals: D1xS1FDC024, D1xB2X05

Issued to European Safety Systems Ltd. London, United Kingdom

is found to comply with the requirements in the following Regulations/Standards: Regulation MSN 1874 Amendment 7, item No. UK/3.53. SOLAS 74 as amended, Regulation II-2/7 & X/3, 1994 HSC Code 7, 2000 HSC Code 7, FSS Code 9, IMO MSC.1/Circ.1242 and IMO MSC.1/Circ.1487

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

This Certificate is valid until 2029-02-15.

Issued at London on 2024-03-04

DNV local unit: UK & Ireland CMC & VMC

Approval Engineer: Martin Skårerverket



Approved Body No.: 0097

for DNV UK Ltd.

Mydlak-Röder, Christine **MER Service Responsible**

ž0Š Maritime & Coastguard Agency

by the MCA

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the

Approved Body. "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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) UK Approved Body Authorised Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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



This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.



Job Id: Certificate No: MERB000085K Revision No: 0

Product description

D1xS1FDC024 Alarm Horn Sounder

UL, cUL, ULC, IECEx and ATEX approved explosion proof alarm horn sounder. Sound output 115dB(A). Type 4/4X, IP66 marine grade, corrosion proof aluminium enclosure.

D1xB2X05 Xenon Strobe Beacon

UL, cUL, ULC, IECEx and ATEX approved explosion proof 5 Joule Xenon strobe beacon. Effective candela 156.65cd. Type 4/4X, IP66 marine grade, corrosion proof aluminium enclosure.

Application/Limitation

Ex-certification is not covered by this certificate. Application in hazardous area to be approved in each case according to the Rules and Ex-Certification/ Special Condition for Safe Use listed in valid Ex-certificate issued by a notified/recognized Certification Body.

The equipment is found to comply with the following location/application dependent requirements. (for definition of each of the location classes, see below the table):

MODEL	TEMPERATURE	VIBRATION	EMC	ENCLOSURE (IP)
D1xS1FDC024	TEM-D	VIB-A	EMC-A	IP 66
D1xB2X05				

Definition of the location classes with reference to relevant standards:

 Temperature:
 Location (-25°C to +70°C) (ref. IEC 60092-504:2016) table 1 item 6-7)

 Vibration A:
 (±1mm / 0.7g) (ref. IEC 60092-504:2016 table 1 item 10)

 EMC A:
 Bridge and open deck zone (ref. IEC 60092-504:2016 table 1 item 13-20)

 Enclosure:
 Outdoor (IP66) (ref. IEC 60092-504 (2016) table 1 item 12)

Type Examination documentation

Tests carried out

Applicable tests according to:

- IEC 60092-504:2016,
- IEC 60533:2015,
- EN 54-3:2014 incl. A1:2019,
- EN 54-23:2010 (additional test for the Xenon Strobe Beacon).

Marking of product

For identification to this type examination certificate the products shall be marked with:

- Manufacturer's name or trademark
- Type designation
- Mark of Conformity (UK Conformity Mark), followed by
 - identification number of the Approved body involved in production control (MER D)
 - the year the mark is affixed
 - Example: 0097/2024