

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB000085K**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

## 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, LO, United Kingdom

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2023/1667,

item No. MED/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

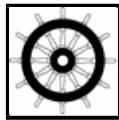
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2029-02-15**.

Issued at **Høvik** on **2024-02-16**

DNV local unit:  
**UK & Ireland CMC & VMC**

Approval Engineer:  
**Frode Nygård**



Notified Body  
No.: **0575**

for **DNV AS**

.....  
**Mydlak-Röder, Christine**  
Head of Notified 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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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.



**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: ( $\pm 1\text{mm} / 0.7\text{g}$ ) (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 (wheel mark), followed by
    - identification number of the NoBo involved in production control (MED D)
    - the year the mark is affixed
    - Example: 0575/2024