

TYPE EXAMINATION CERTIFICATE – EC MODULE B

Certificate no.:
MEDB000096A

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

that the Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces: Heat detectors – Point detectors

with type designation(s)
LICO HDL Marine Heat Detector Series

issued to
LICO Mechatronic Kft.
Érd, Pest, Hungary

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

Regulation **(EU) 2024/1975**,

item No. MED/3.51c. SOLAS 74 as amended, Regulation II-2/7 & X/3, 1994 HSC Code 7, 2000 HSC Code 7, FSS Code 9, IGF Code 11 and IMO MSC.1/Circ.1242

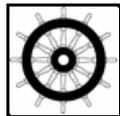
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2030-06-16**.

Issued at **Hamburg** on **2025-06-17**

DNV local unit:
Ostrava

Approval Engineer:
Heinz Scheffler



Notified Body
No.: **0098**

for **DNV SE**

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 SE 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 USD 300 000.

Product description

HDL - Heat Detector LICO

The product designation of the device is made from combining the desired product characteristics in accordance with the following structure / nomenclature

Nomenclature

(e.g. HDL-3XL-MED - D - 2 - ST - 165 - B - S - 4 - E - 1 - S)

(Position 1 2 3 4 5 6 7 8 9 10 11)

Position	Characteristic	Characteristic value	Description
1	Box Type:	HDL-2-MED HDL-3-MED HDL-3XL-MED HDL-5-MED HDL-6-MED HDL-6XL-MED HDL-7-MED HDL-7XL-MED	75 mm (length) 80 mm (width) 57 mm (height) 75 mm (length) 80 mm (width) 57 mm (height) 125 mm (length) 80 mm (width) 57 mm 120 mm (length) 122 mm (width) 80 mm 120 mm (length) 120 mm (width) 116 mm 150 mm (length) 150 mm (width) 130 mm 152 mm (length) 102 mm (width) 90 mm 152 mm (length) 152 mm (width) 130 mm
2	Sensor Housing	S D	Single Threaded Double Threaded
3	Switch type	1 2	Normally Open Normally Close
4	Sensor material	BR ST	Brass Stainless steel
5	Nominal Temperature:	60 71 88 99 107 135 165 187 232	60 °C / 140 °F (EN 54-5 class A1 static response) 71 °C / 160 °F (EN 54-5 class B static response) 88 °C / 190 °F (EN 54-5 class C static response) 99 °C / 210 °F (EN 54-5 class D static response) 107 °C / 225 °F (EN 54-5 class D static response) 135 °C / 275 °F (EN 54-5 class G static response) 165 °C / 325 °F (EN 54-5 tested static response) 187 °C / 360 °F (EN 54-5 static response tested) 232 °C / 450 °F (EN 54-5 static response tested)
6	Sensor mounting	L B	Lid Box
7	Wiring block material:	S C	Standard Ceramic
8	Entries	1 2 3	One Entry Two entry Three entry
9	Type of Cable Gland	A B C D	M16 Thread M20 thread Cable Gland (M20 standard)" Cable Gland (1/2" NPT standard)"
10	Seal Lid	1 2 3	HT Silicone (standard)" Neopren EPDM
11	Resistor	N E S B	None EOL Series Both

Application/Limitation

Before installation: The Operation, Installation & Safety Manual for ATEX & EN54-5 certified HDL heat detector units (02.2025, Document No. GDT02049) is to be observed.

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

Type Examination documentation

Test Reports and Documents: MEDB000096A_Overview_Documents Rev.00

Tests carried out

Applicable tests according to:

- EN 54-5:2017 + A1:2018
- IEC 60092-504:2016
- IEC 60533:2015

Marking of product

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

- Manufacturer's name
- Type designation with device type
- Serial Number
- Mark of Conformity, according to Chapter 2 -The Wheel Mark- of the Council Directive (MED)

END OF CERTIFICATE