

[1] **TYPE EXAMINATION CERTIFICATE**
[2] **Directive 2014/34/EU**
Equipment and protective systems intended for use in potentially
potentially explosive atmospheres.

[3] Type Examination Certificate Number ACE24ATEX014X Rev00
[4] Product Laboratory Deep Freezer with explosion-proof interior
[5] Manufacturer Qingdao Haier Biomedical Co., Ltd.
[6] Address No.280 Fengyuan Road, High-tech Zone, 266111 Qingdao, Shandong, P.R. China

[7] This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] Advanced Consulting and Engineering Iberia SL (A.C.&E. Iberia S.L.), certifies based on a voluntary assessment that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive 2014/34/EU.

The examination and test results are recorded in the confidential Report nº. EX_EXI003_24_24-1466

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0 2018: Explosive atmospheres — Part 0: Equipment — General requirements
EN 60079-11: 2013 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
ISO 80079-36: 2016 - Part 36: Non-electrical equipment for explosive atmospheres Basic method and requirements

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the point 17 of This certificate.

[11] This TYPE EXAMINATION CERTIFICATE relates only to the design of the specified equipment and not to specific items of equipment subsequently manufactured.

[12] The marking of the equipment or protective system shall include the following:



II 3/- G IIC T6

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Date: 28/10/2024



**Advanced Consulting and Engineering
Iberia SL**

Matteo Marconi, CEO

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[13]

SCHEDULE

[14]

TYPE EXAMINATION CERTIFICATE No:ACE24ATEX014X Rev00

[15]

Description of equipment

The laboratory deep freezer DW-25L262SF comprises a metal outer enclosure with a hinged door. The storage area insider the freezers is classified as Zone 2 area. All other parts of the freezer units, including the locations where the compressor, control circuitry, cooling pipes etc. are situated, are in a non-hazardous area. The outside of the freezers is also classified as safe area.

The only electrical part situated in the Zone 2 area is a Negative Temperature Coefficient (NTC) sensor, which is defined as simple apparatus and is supplied by the intrinsically safe barrier which is produced by the manufacturer, and has intrinsically safe outputs. The I.S. barrier circuits is mounted in the safe area.

The storage area inside the freezer has a non-metallic lining.

The NTC sensor is mounted completely in the Zone 2 area, only the cables connected to this part pass between the Zone 2 and non-hazardous areas. The cables are sealed at the boundary of the Zone 2 area to ensure segregation from the non-hazardous area.

The inner temperature range inside the storage area of the freezers is -10°C to -25°C.

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[13] **SCHEDULE**

[14] TYPE EXAMINATION CERTIFICATE No: ACE24ATEX014X Rev00

[16] Test documents are listed in the test report nº
EX_EXI003_24_24-1466

[17] Special conditions for safe use
 1. Where the storage area inside the freezers is lined with a non-metallic material, this may present a potential electrostatic charging hazard. Clean the surface of non-metallic material only with a damp cloth.
 2. The freezers shall only be used in the safe area.
 3. If the substance stored in the storage area can volatile the explosive gas, it must be placed in the well-sealed container to avoid formation of explosive gas atmosphere in the normal operation of the freezers.
 4. Periodically check the sealing of storage area without any leakage by the end user.
 Compliance with the instructions contained in the Operation and Maintenance Manual ensures the effectiveness and reliability of the protective device or system.
 Compliance with the instructions contained in the Operation and Maintenance Manual ensures the effectiveness and reliability of the protective device or system.
 5. For use: IIC T6

[18] Essential Health and Safety Requirements
 Are met by the standard listed in item 9 and the conformity is demonstrated in the report:
 EX_EXI003_24_24-1466

[19] Documents and technical datasheets:

Title	Object	Revision	Date
DW-25L262 Zone Map	BE0YA1E00-01	A	2024/06/05
DW-25L262 Wiring Diagram	BE0YA1E00-02	A	2024/06/11
DW-25L262 Outline Dimensional Drawing	BE0YA1E00-03	A	2024/06/05
DW-25L262 Explosion View	BE0YA1E00-04	A	2024/06/04
Schematics&BOM for Safety Barrier	4-027400056-1	B	2017/08/14
PCB Drawing for Safety Barrier	4-027400056-2	B	2017/08/14
DW-25L262SF	DW-25L262SF	A	2024/08/20

The documents above-mentioned are strictly confidential and they are of only use of authorities.
 A copy of the documents are saved by A.C.&E. Iberia S.L.

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[20] Certificate History

Number of certificate	Rev.	Comments	Date
ACE24ATEX014X Rev00	00	First issue	28/10/2024

Date: 28/10/2024



Advanced Consulting and Engineering
Iberia SL

Matteo Marconi, CEO

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