



Type Examination Certificate CML 18ATEX4058X Issue 0

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment Freezers DW-25L92FL/DW-25L92SF and DW-30L278FL/DW-30L278SF

3 Manufacturer Haier Medical and Laboratory Products Co., Ltd.

4 Address Haier Industrial Park

Economic Technology Development Zone

Qingdao 266510

China

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of equipment intended for use in potentially explosive atmospheres given in Annex II of Directive 2014/34/EU.

The examination and test results are recorded in the confidential reports listed in Section 12.

- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of certification (affecting correct installation or safe use). These are specified in Section 14.
- This Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Annex VIII apply to the manufacture of the equipment or component.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2012+A11:2013

EN 60079-11:2012

10 The equipment shall be marked with the following:



) II 3/- G

Ex ic IIC T6 Gc

Ta = -20°C to +32°C

Note: The equipment has been evaluated as being suitable for use in an ambient temperature range of -20°C to +32°C. The manufacturer is permitted to mark a reduced range with temperatures within these limits.

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Technical Manager

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1 of 3

Version: 11.0 Approval: Approved





11 Description

The DW-25L92FL/DW-25L92SF and DW-30L278FL/DW-30L278SF freezers comprise a metal outer enclosure with a hinged door.

The storage area inside the freezers is a 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 unit is also to be a non-hazardous 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 a barrier circuit which is produced by the manufacturer, and has intrinsically safe outputs. The I.S. barrier circuit 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.

Shelves/drawers are situated inside the unit. The control panels which control the function of the freezers are mounted at the top of the units. The operating temperature range inside the storage area of the freezers is -10°C to -25°C for the DW-25L92FL/DW-25L92SF and -10°C to -30°C for the DW-30L278FL / DW-30L278SF.

12 Certificate history and evaluation Reports

Issue	Date	Associated report	Notes
0	21/05/2018	R11602A/00	Report for the prime certificate issue
		R11602B/00	Report for the I.S. barrier assessment

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- 13.2 Each NTC sensor shall be subjected to a routine insulation resistance test.
- Units with the model number suffix 'FL' shall be fitted with the drawers and internal lining which are made of the black anti-static non-metallic material option.

Units with the model number suffix 'SF' shall be fitted with the drawers and internal lining which are made of the white non-metallic material option, and the warning label relating to potential electrostatic charging hazards shall be applied.

This certificate shall only be copied





- The manufacturer shall ensure that the intrinsically safe barrier assembly is securely fixed in place and that the following separations are maintained:
 - > 0.8mm clearance between the barrier temperature probe connection wires and connector, and all other conductive parts except earth.
 - > 50mm between the barrier probe temperature probe connection wires and connector, and the barrier input wires and connector.

14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

Where the white coloured non-metallic material is used for the internal drawers and internal lining of the storage area inside the refrigerators, this may present a potential electrostatic charging hazard and shall be cleaned only with a damp cloth. This condition does not apply to the black coloured non-metallic material option of the drawers and internal lining.

Certificate Annex



Equipment Freezers DW-25L92FL/DW-25L92SF and DW-30L278FL /

DW-30L278SF

Manufacturer Haier Medical and Laboratory Products Co., Ltd.

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
4-0270501214P	1 of 1	Α	21/05/2018	PET
4-0270501214QB	1 of 1	Α	21/05/2018	PET
DW-25L92FL/SF	1 of 1	Α	21/05/2018	Sensor Diagram (A3-3)
DW-25L92FL/SF	1 of 1	Α	21/05/2018	Structural Drawing (A3-1)
DW-25L92FL/SF	1 of 1	В	21/05/2018	Circuit Diagram for Sensor
DW-25L92FL/SF	1 of 1	Α	21/05/2018	Structural drawing for interior
DW-25L92FL	1 of 1	Α	21/05/2018	Nameplate (A3-5)
DW-25L92SF	1 of 1	Α	21/05/2018	Nameplate (A3-6)
DW-30L278FL/SF	1 of 1	Α	21/05/2018	Sensor diagram (A3-4)
DW-30L278FL/SF	1 of 1	Α	21/05/2018	Structural Drawing (A3-2)
DW-30L278FL/SF	1 of 1	Α	21/05/2018	Structural Drawing for interior (A3-6)
DW-30L278FL/SF	1 of 1	В	21/05/2018	Sensor and safety (A3-8)
DW-30L278FL	1 of 1	Α	21/05/2018	Nameplate (A3-7)
DW-30L278SF	1 of 1	Α	21/05/2018	Nameplate (A3-8)
A4-2	1 of 1	В	21/05/2018	NTC Safety Barrier of Sensor
4-0274000056	1 of 1	С	21/05/2018	Safety Barrier
KFB-20-F01	1 to 3	В	21/05/2018	Safety Barrier PCB drawing