

2~8°C Ice-lined Refrigerator

The refrigerators are designed for tropical climates to store all temperature sensitive products vaccines, blood products, Injectable, reagents and biological products for epidemic prevention, clinics, hospitals and vaccine storage centers

Chest type Ice-lined refrigerators maintain temperatures of +2°C to +8°C. Not more than 8 hrs. continuous or intermittent power should be sufficient per 24 hrs. to maintain vaccine temperature below 8 deg. C

Ergonomic Design

- **Internal:** Electro-polished Stainless steel 304 of 20-gauge sheet with an additional special ice lining consisting of icepacks covered by strong plastic shell to maintain the holdover time for internal temperature. Top and bottom of the baskets covered with horizontal water cool pack.
- **External:** White coloured external Corrosion and scaling free advanced PU coated CR sheet of 1 mm thickness used as external material. Same technology used in car outer body paint.
- Provision for drainage for the waste water.
- Solid door with handle with lock & key arrangement to avoid unauthorized access.
- All manufacturing done with GMP protocols through on complete CNC based machines to avoid sharp corners, welding burrs and manufacturing defects.
- Legs in the base with rotating screw type height adjustments to balance the weight on uneven floor with 100 mm ground clearance optionally.
- The unit is run to capable of operating continuously in ambient temperature of (-) 20 °C to (+) 50 °C and relatively humidity of 15-90%.

Temperature Control System

- Programmable micro-processor based temperature controller having facility to set of temperature with an accuracy for +/- 0.5 °C
- ON/OFF Switch with power indicator
- 3 digit digital LED/LCD display (to one decimal point) of cabinet temperature. The sensor should be placed 25 to 50 mm above base of storage chamber.
- Audio (minimum 65 dB) and visual alarm against the violation of temperature range (less than +2°C)
- Min. & Max. cabinet temperature digital display of last 24 hrs. and breaches during last 24 hour can be provided optionally
- The unit is sealed to protect it from dust, moisture or condensed water falling over it
- Child lock facility and defrosting program.
- Provision to set minimum and maximum temperature at 0.1 °C to programmed the unit for continuous operation.

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inside structure



Lock



Controller

Refrigeration System

- Optimized and tropical refrigeration system design for continuous running without fail
- Compression Cycled, CFC-Free (both for refrigeration and insulation) All system tubing (suction tube, freezer tube and condensing tube) should be of minimum 99.97% of pure copper coil. Inlet of Capillary kept outside the PUF body.
- Temperature of a full vaccines to remain +2 °C to +8 °C during continuous availability of energy at ambient temperature +5 to +45 °C with intermittent/continuous electricity supply 8 hrs in a 24 hrs cycle. The temperature difference between any two points in the cabinet should not be more than +2 °C once stabilized.
- Target holdover time is more 24 hrs or more in a continuous even at external temperature of 43 °C and Humidity of 95 % Rh.
- Danfoss make Hot and cold compressor) starting at 172 volts (22% below rated voltage).
- All CFC and CHFC free non environmental friendly refrigerants used

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Accessories

- **Baskets**-PU Coated wired Vaccine Storage Basket allowing free circulation of air suitable to match the net volume requirement.
- **Stem Alcohol thermometer**- Glass Thermometer (Specification and standard as per MOHFW, WHO-PQS approved) - one piece per unit range of -30 to +50 degree centigrade.
- **Voltage stabilizer** - As per the MOHFW approved specifications and standard can be supplied optionally with an extra cost



Baskets

Standards and Safety

- Product is authentically CE certified by europiu union body.
- Authentic PQS certification done by WHO. Meets all regulatory requirements of WHO/UNICEF Standard WHO/PQS/E03/RF03.1.for Ice Lined Refrigerators. Uniq certificate no provided in the chart.



Model	HBC-70	HBC-200	HBC-340
Vaccine Storage Capacity	45L	94.5L	200L
Gross Volume	71L	198L	340L
Net/Gross Weight	64/70 (kg) 141.0/154.3 (lbs)	108/114 (kg) 238.1/251.3 (lbs)	152/181 (kg) 335.1/399.0 (lbs)
Ambient Temp.	5 °C-43 °C	5 °C-43 °C	5 °C-43 °C
Compressor	Secop compressor	Secop compressor	Danfoss compressor
Refrigerant	R134a	R134a	R134a
Interior Dimensions(W*D*H)	400*360*610(mm) 15.7*14.2*24.0 (in)	976*336*610(mm) 38.4*13.2*24.0 (in)	1410*415*645(mm) 55.5*16.3*25.4(in)
Exterior Dimensions(W*D*H)	673*663*818(mm) 26.5*26.1*32.2 (in)	1243*633*818(mm) 48.9*24.9*32.2 (in)	1650*650*855(mm) 65.0*25.6*33.7(in)
Packing Dimensions(W*D*H)	755*760*880(mm) 29.7*29.9*34.6 (in)	1325*760*880(mm) 52.2*29.9*34.6 (in)	1705*760*1010(mm) 67.1*29.9*39.8(in)
Container Load (sets)20'/40'/40'H	42/90/135	24/54/80	18/36/36
Holdover Time at 43 °C	more than 25hrs	more than 25hrs	more than 25hrs
Power Consumption: stable running	0.64 KW.h/24h	1.34 KW.h/24h	2.06 KW.h/24h
Power Consumption: cool down test	2.4 KW.h/24h	4.01 KW.h/24h	2.13 KW.h/24h
Certificate	CE,ISO 13485 & WHO/PQS	CE,ISO 13485 & WHO/PQS	CE,ISO 13485 & WHO/PQS
WHO PQS Reference No.	PQS/ E003/005	PQS/ E003/006	PQS/ E003/015



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In reply please
refer to: UK/DM/QSS/sj

Your reference: Letter 20 July 2009

Ms. Weiwei Wang
Business Development
Haier Medical and Laboratory Products Co., Ltd
No. 1 Haier Road, 266101 Qingdao,
République Populaire de Chine

10 November 2009

Dear Ms Weiwei Wang,

**Notification of WHO PQS pre-qualification of two models of Iceline refrigerator
HBC 70 and HBC 200**

The World Health Organization, Performance Quality and Safety secretariat is pleased to inform you that the above mentioned products submitted for pre-qualification under the Performance, Quality and Safety (PQS) scheme, have now been found suitable for UN procurement services.

These products namely "HBC 70" and "HBC 200" manufactured by Haier Medical and Laboratory Products Co., Ltd, No. 1 Haier Road, 266101 Qingdao, China, are now included in our list of pre-qualified products with the following PQS code number:

- :: PQS / E03 / 005: Iceline Refrigerator, HBC70, HAIER, China
- :: PQS / E03 / 006: Iceline Refrigerator, HBC200, HAIER, China

As mentioned in the guidelines for manufacturers, each pre-qualified product is subjected to an annual review. We will notify you formally of the date of next year's dossier re-examination.

We would like to take this opportunity to remind you that although PQS does not explicitly call for active monitoring, we do require notification of product failures. As per the terms of the agreement, this is your obligation to actively check with your customer base and notify us of the occurrence of such events.

Yours sincerely,

Mr Denis Maire
Technical Officer
PQS Secretariat

cc

Katinka Rosenbom, UNICEF SD
Annika Salovaara, UNICEF SD
Abeyasinghe Nihal, SEARO
Thapa Arun, SEARO
Michel Zaffran, WHO Optimize
Stephane Guichard, SEARO

Mihigo Richard, AFRO
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Baoping Yang, WPRO
Shafiqul Hossain WPRO
Laura E. Fuller, AMRO/PAHO
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Thomas Cherian, FCH/IVB/EPI
Ezzedine Mohsni, EMRO
Niyazi Cakmak, EURO
Rebecca Martin, EURO
Paul-Athanase Acriviadis, GMG/OSS/CPS
Palle Madsen, UNICEF SD

C E R T I F I C A T E

of Conformity

EC Council Directive 2004/108/EC

Electromagnetic Compatibility



Registration No.: AE 50292540 0001

Report No.: 15030153 005

Holder: Haier Medical and Laboratory
Products Co., Ltd.
Haier Industrial Park
Economic Technology Development Zone,
Qingdao 266510
P.R. China

Product: Refrigerator
(Ice-lined Refrigerator)

Identification: HBC-340 HBC-200 HBC-70 HBC-110 (Haier)

Serial No.: n.a.

Remark: Issued in conjunction with TÜV Rheinland
license CC 50143610 0001-0005.

Tested acc. to: EN 55014-1:2006+A1+A2
EN 55014-2:1997+A1+A2
EN 61000-3-2:2006+A1+A2
EN 61000-3-3:2013

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with all provisions of Annex I of Council Directive 2004/108/EC. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to the a.m. Directive.



Certification Body

Date 18.09.2014

Xinhua Lu

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may only be used if all relevant and effective EC Directives are complied with. CE

CERTIFICATE



of Conformity
EC Council Directive 2006/42/EC
Machinery

Registration No.: AM 50289325 0001

Report No.: 15068829 001

Holder: Haier Medical and Laboratory
Products Co., Ltd.
Haier Industrial Park
Economic Technology Development Zone,
Qingdao 266510
P.R. China

Product: Refrigerator
(Ice-lined Refrigerator)

Identification: HBC-70 HBC-200 HBC-340 (Haier)

Serial No.: Engineering sample

Remark: Refer to test report 15068829 001 for details.

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. This is to certify that the tested sample is in conformity with all provision of Annex I of Council Directive 2006/42/EC, referred to as the Machinery Directive. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex II of the Directive.

Shanghai, 29.07.2014



Certification Body

A handwritten signature in blue ink, appearing to read 'Aileen Hu', written over a horizontal line.
Aileen Hu

TÜV Rheinland Shanghai Ltd. - Shanghai 200072 - P.R.China

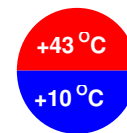
CE The CE marking may be used if all relevant and effective EC Directives are complied with.





CODE PQS E003/015

Hot Zone appliance
Type: ice-lined refrigerator,
Power source : compression
220-240V 50/60Hz,
Model: HBC-340



COMPANY NAME AND ADDRESS

Contact person : Ms. Xiao Zhen
 Company name : Haier Medical and Laboratory Products Co., Ltd
 Address : Brand Building, Haier Industry Park, No.1 Haier Road, Qingdao 266101, P.R. China
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 Fax: + 86 532 88936010
 E-mail: xiaozh@haier.com

SPECIFICATIONS

Vaccine storage capacity
Manufacturer's gross volume
External dimensions, H x W x L

REFRIGERATOR

200
 340
 164.4 x65 x 84.6

FREEZER

--N/A
 --N/A
 --N/A

UNITS

litres
 litres
 cm

PERFORMANCE AT (Temperature °C)

Icepack freezing, with vaccine
Icepack freezing, without vaccine
Holdover time during power cut
Power consumption: stable running
Power consumption: cool down test

43

-- N/A
 -- N/A
 34h47mn
 2.73
 4.32

--N/A

--N/A
 --N/A
 -- N/A
 -- N/A
 -- N/A

°C

kg/hrs
 kg/hrs
 hours,mn
 kw/24 hrs
 kw/24 hrs

ENERGY REQUIREMENTS

Energy sources: 220-240V, 50/60 Hz

SPARES NEEDED PER 10 UNITS	Part No.	Qty	Price/unit
Thermostat	0074091494	1	27.6USD
Compressor	0074000202	1	130.8USD

COMMENTS & ACCESSORIES

Report reference: WB-11-079 Meets WHO/PQS/E003/RF03-VP.2
Laboratory name: China Household Electric Appliance Research Institute (CHEARI)

Accessories: Instruction manual, key, tray

Shipping volume / weight 1.42m³ / 165 kg

Price year: 2010

Incoterms: FCA Qingdao

PRICE per unit

1-99 units: 1,196 US\$
 99-199 units: 1,178 US\$
 More than 200 units: 1,162 US\$

Prequalified on 03 March 2011