

# HARRIS Freezer Family - K6 conform



- HARRIS-HAHL398S**
- Volume: 398 liters
  - Capacity for 300 2" Boxes
  - 12 Racks ZKL304-552B-CT à 25x Boxes per Rack



- HARRIS-HAHL778S**
- Volume: 778 liters
  - Capacity for 600 2" Boxes
  - 24 Racks ZKL304-552B-CT à 25x Boxes per Rack



- HARRIS-HAHL528S**
- Volume: 528 liters
  - Capacity for 400 2" Boxes
  - 16 Racks ZKL304-552B-CT à 25x Boxes per Rack



- HARRIS-HAHL858S**
- Volume: 858 liters
  - Capacity for 660 2" Boxes
  - 12 Racks ZKL304-552B-CT à 25x Boxes per Rack
  - 12 Racks ZKL304-652B-CT à 30x Boxes per Rack



- HARRIS-HAHL678S**
- Volume: 678 liters
  - Capacity for 500 2" Boxes
  - 20 Racks ZKL304-552B-CT à 25x Boxes per Rack



- HARRIS-HAHL1008S**
- Volume: 1008 liters
  - Capacity for 770 2" Boxes
  - 14 Racks ZKL304-552B-CT à 25x Boxes per Rack
  - 14 Racks ZKL304-652B-CT à 30x Boxes per Rack

## Freezer Racks



- ZKL304-652B-CT**  
Freezer rack for Harris HAHL858S+1008S for 30 pcs. 2" boxes



- ZKL304-552B-CT**  
Freezer rack for Harris HAHL398S-1008S for 25 pcs. 2" Boxes

## Cryogenic Boxes



- ZKPP-81-2**  
81 well, polypropylene could include 81 vials of 2ml



- ZKPC-81-2**  
81 well, polycarbonate could include 81 vials of 2ml



- ZKZH-81-2**  
81 Well, Paper could include 81 vials of 2ml



## -86°C Ultra-low Temperature Freezer

- Targeted Refrigeration • Fast Refrigeration  
Energy-saving & Environmentally Friendly*

## HARRIS - HAHL858S

### Targeted Refrigeration

The new generation of ultra-low temperature refrigeration system can ensure fast refrigeration.

### Five Magic Features for Energy Saving

Imported high-efficiency compressor + separated evaporator + composite heat exchanger + optimized fractional condensation & separation system + high-efficiency thermal insulation system can save energy and reduce power consumption of the freezer by 40%.

### The Largest Volume & Widest Temperature Span around the World

Based on the characteristics of biological sample storage, space design of the refrigerator is optimized to accommodate up to 66000 standard 2ml-vials for cryopreservation, which was specially designed for use in a biobank.

### Three-dimensional Thermal Insulation

The 6 sides of the cabinet are made from high-efficiency VIP: Vacuum Insulation Panel, and the thermal insulation design of the inner door made from foaming material and the outer door system was awarded with multiple patents, which can improve the thermal insulation performance of the freezer.

### Energy-saving & Environmentally Friendly

Equipped with natural refrigeration gases.





**7" LED Screen Control System**

- The 7" LED touch screen has clear display user-friendly interface and more accurate temperature control, which can indicate operating status clearly;
- The high-precision microcomputer control system and platinum resistor sensors enable users to set temperature inside the cabinet within a range from -40 to -86°C.



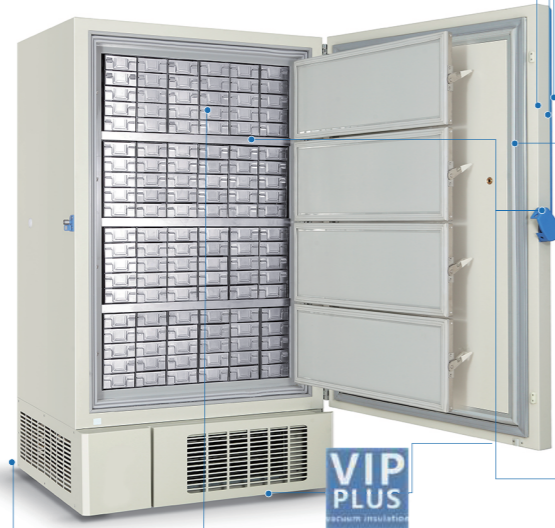
**Security System**

- The perfect audible & visual alarm system: high and low temperature, sensor error, power failure, low battery, door ajar, main board communication error high ambient temperature, samples out of date notification etc;
- The compressor start delay and stopping interval protection can ensure reliable operation;
- Both the touch screen controller and key board controller have password protection which can prevent any adjustment of operation without permission;



**Refrigeration System**

- The applied high-efficiency compressors and EBm fans are energy-saving and highly efficient;
- The large finned condenser with a space between fins  $\leq 2\text{mm}$ , providing effective heat dissipation.
- HAHL528S/678S/778S/858S/1008S with twin compressor, if one is damaged, the other one could keep the temperature at -70°C stably.
- Standard with VIP board for high efficiency cooling performance. Door with hot gas pipe surrounding for defrost



**Alarm Upgrading**

USB data storage function: can store relevant operating data, which can be downloaded and checked, ensuring improved security and reliability of sample storage.



**Human-oriented**

- 2-layer heat insulating foamed door with inner and outer door seal and the insulation design of the outer door system with multiple patents can prevent loss of refrigerating capacity in an effective way;
- The 6 sides of the cabinet are made from high-performance VIP vacuum insulation material, improving thermal insulation performance to a large extent.



**Human-oriented**

- The new designed assisting handle and vacuum release port let the freezer be operated single-handed to open and close the outer door.
- The newly added file box makes recording easier and more convenient.
- The liner made from High quality galvanized steel sheet for medical use is low-temperature tolerant and corrosion-resistant, which has a long service life and is easy to clean;
- The universal casters and leveling feet design are more convenient for movement and fixation.



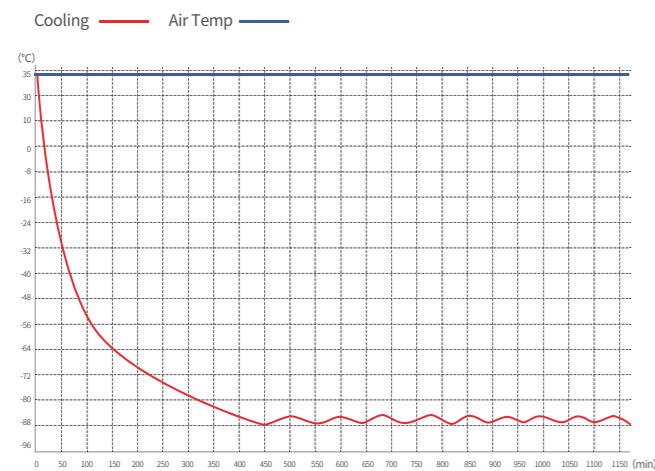
**Supplies for Cryopreservation**

Inventory racks/boxes for cryopreservation are optional.

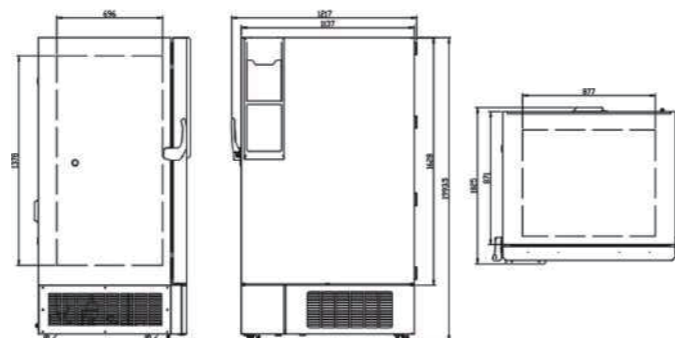
**Scope of Application**

Suitable for use in hospitals, health and disease prevention systems, research institutions, colleges & universities, the electronic industry, biological engineering, laboratories in colleges & universities, food storage applications, etc.

**Performance Data / Cooling Curve**



**External Dimensions**



**Specification Chart**

-86°C Ultra-low Temperature Freezer	
<b>Model</b>	HARRIS-HAHL858S
<b>Cabinet Type</b>	Upright
<b>Capacity(L)</b>	858
<b>Internal Size(W*D*H)mm</b>	877*696*1378
<b>External Size(W*D*H)mm</b>	1217*1025*2005
<b>Package Size(W*D*H)mm</b>	1280*1110*2134
<b>NW/GW(kg)</b>	390*431
Performance	
<b>Temperature Range</b>	-40~-86°C
<b>Ambient Temperature</b>	16-32°C
<b>Cooling Performance</b>	-86°C
<b>Climate class</b>	N
<b>Controller</b>	Microprocessor
<b>Display</b>	Touch screen
Refrigeration	
<b>Compressor</b>	2pcs
<b>Cooling Method</b>	Direct Cooling
<b>Defrost Mode</b>	Manual
<b>Refrigerant</b>	Natural mixture gas K6 conform
<b>Insulation Thickness(mm)</b>	130
Construction	
<b>External Material</b>	High quality steel plates with spraying
<b>Inner Material</b>	Stainless steel
<b>Shelves</b>	3(stainless steel)
<b>Door Lock with Key</b>	Yes
<b>External Lock</b>	Yes
<b>Access Port</b>	3
<b>Casters</b>	4+(2 leveling feet)
<b>Data Logging/Interval/Recording Time</b>	USB/Record every 1 minute / 365 days
<b>Door with Heater</b>	Hot gas heating
Alarm	
<b>Temperature</b>	High/Low temperature, High ambient temperature
<b>Electrical</b>	Power failure, Low battery
<b>System</b>	Sensor error, Built-in datalogger USB failure, Main board communication error, System failure, Condenser cooling failure, Door ajar, Samples out of date
Electrical	
<b>Power Supply(V/HZ)</b>	220/50, 220/60, 110/60
<b>Rated Power(W)</b>	1900
<b>Input Power(W)</b>	2380
<b>Power Consumption(KWh/24h)</b>	12.706 (at -80°C)
<b>Rated Current(A)</b>	10.86
Options Accessory	
<b>System</b>	Chart recorder, CO2 backup system, Printer, Backup battery, RS485, Remote alarm contact

\*The model, parameters and performance specified in this brochure may be changed without prior notice because of product upgrading.  
 \*There may be differences between the product images shown in this brochure and the actual products. When you are buying any product, please check the actual product.



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