

# -86°C Ultra-low Temperature Freezer

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



Ihr Fachhändler:  
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## DW - HL398D

-  **Excellent temperature uniformity**  
Direct cooling circulation technology with coil evaporator maintains a uniform temperature throughout the chamber.
-  **Trusted SECOP brand compressor**  
SECOP compressor maintains a reliable -86°C ultra low temperature environment, that increases efficient sample storage.
-  **Ease of maneuvering**  
Equipped with four heavy duty casters for ease of moving.
-  **Vacuum insulation panels**  
Vacuum insulation panels allow for increased internal capacity with the same footprint as traditionally foamed freezers, as well as it ensures excellent temperature stability.
-  **Energy-saving & Environmentally Friendly**  
HC Refrigerant.



### High-precision Temperature Control

- Digital temperature display: displays inner temperature, power and voltage, ambient temperature and more at the same time.
- 2 inches high-brightness digital temperature display, microprocessor-based temperature controller, -40°C~-86°C can be set freely.



### Security System

- Audible and visible alarm system, multiple alarms including high temperature alarm, low temperature alarm, power failure alarm, low battery alarm, sensor failure alarm, door ajar alarm, high ambient temperature alarm, communication failure alarm, battery power detection failure alarm and condenser overheating alarm etc.;
- The compressor start delay and stopping interval protection can ensure reliable operation;



### Refrigeration System

- The imported high-efficiency compressor and EBM fan are energy-saving and highly efficient;
- The large finned condenser with a space between fins  $\leq 2\text{mm}$ , providing effective heat dissipation.



### Supplies for Cryopreservation

Freezer racks/boxes for cryopreservation are optional.



### Data Storage

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

- 6-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;
- Ergonomic handle, smooth rotating handle track and high-precision pressure relief elastic valve make it easier to open and close the door.



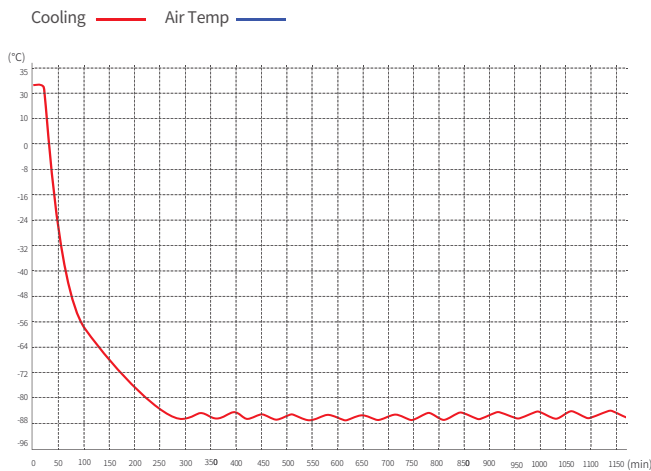
### User-friendly ergonomic design

- The new designed assisting handle and vacuum release port let the freezer be operated single-handed to open and close the outer door;
- The liner made from stainless steel 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.

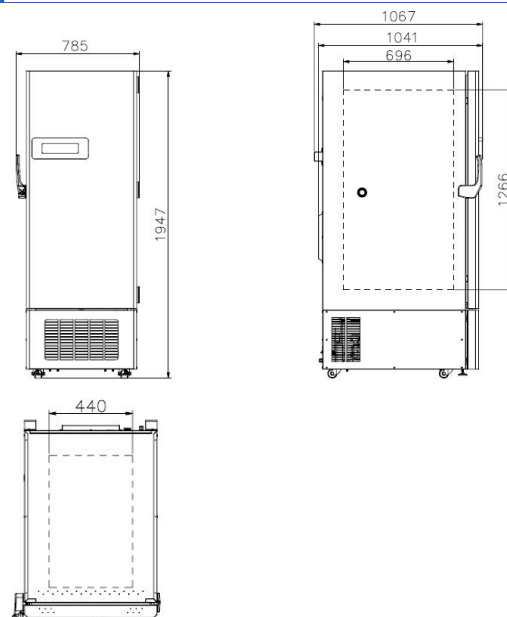
## Scope of Application

Suitable for use in blood banks, hospitals, health and disease prevention systems, research institutions, colleges & universities, the electronic industry, biological engineering, laboratories in colleges & universities, military enterprises, deep-sea fishing companies, etc.

## Performance Data / Cooling Curve



## External Dimension



## Specification Chart

<b>-86°C Ultra-low Temperature Freezer</b>	
<b>Model</b>	DW-HL398D
<b>Cabinet Type</b>	Upright
<b>Capacity(L)</b>	398
<b>Internal Size(W*D*H)mm</b>	440*696*1266
<b>External Size(W*D*H)mm</b>	785*1041*1947
<b>NW/GW(Kg)</b>	237/265
<b>Performance</b>	
<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>	Digital display
<b>Refrigeration</b>	
<b>Compressor</b>	1pc
<b>Cooling Method</b>	Direct Cooling
<b>Defrost Mode</b>	Manual
<b>Refrigerant</b>	HC
<b>Insulation Thickness(mm)</b>	130
<b>Construction</b>	
<b>External Material</b>	Cold rolled steel sheet
<b>Inner Material</b>	Stainless steel
<b>Shelves</b>	3(stainless steel)
<b>Door Lock with Key</b>	Yes
<b>Padlock</b>	Yes
<b>Access Port</b>	2pcs. Ø 25 mm
<b>Casters</b>	4+(2 leveling feet)
<b>Data Logging/Interval/Recording Time</b>	USB/Record every 10 minutes / 2 years
<b>Backup Battery</b>	Yes
<b>Alarm</b>	
<b>Temperature</b>	High/Low temperature, High ambient temperature
<b>Electrical</b>	Power failure, Low battery
<b>System</b>	Sensor failure, Main board communication error, Condenser overheating , Door ajar
<b>Electrical</b>	
<b>Power Supply(V/HZ)</b>	220/50
<b>Accessories</b>	
<b>Standard</b>	Remote alarm contact, RS485
<b>Options</b>	Chart recorder, CO2 backup system

\*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.