-86°C Ultra-low Temperature Freezer

Targeted Refrigeration • Fast Refrigeration
Energy-saving & Environmentally Friendly
Awarded with the Second Prize under State
Technological Invention Award

BL-UL398S

Targeted Refrigeration
The new generation of ultra-low temperature refrigeration system can ensure fast refrigeration and was awarded with the Second Prize under State Technological Invention Award.

Five Magic Weapons 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%.

Low Noise Design
Low-noise direct cooling circuit + suspension frame & sound absorbing compartment & low-noise fan can reduce noise generated by the entire freezer to the largest extent.

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
· Awarded with Certificate for Energy Conservation Product, certificate numbers: CQC18702198378（DW-HL398）；
· Awarded with Certificate for Ecolabelling Products, certificate numbers: CQC18702198378（DW-HL398）.

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 failure ,power failure ,low battery ,door ajar ,main board communication error, high ambient temperature 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 operatiion without permission;

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≤2mm, providing effective heat dissipation.

Supplies for Cryopreservation

Freezer racks/boxes for cryoprese-rvation are optional.

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.

Thermal Insulation System

· 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 Panel material, improving thermal insulation performance to a large extent.
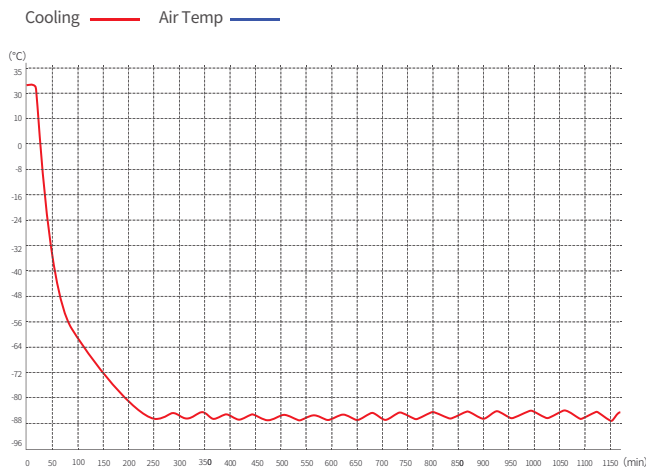
Human-oriented

· The new designed assisting handle and vaccum 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.
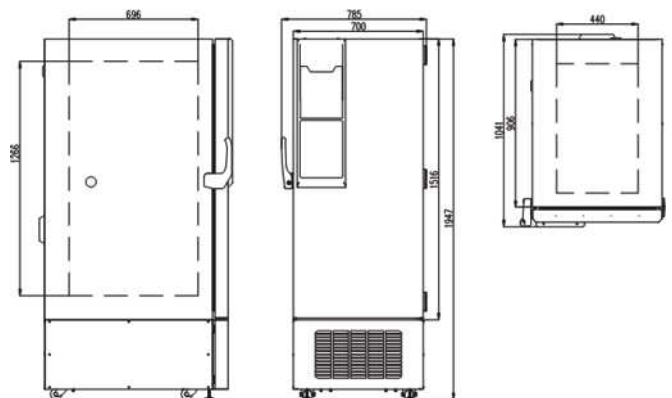
Scope of Application

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

Cooling —— Air Temp ——

External Dimension

🏛 Specification Chart

-86°C Ultra-low Temperature Freezer

Model	BL-UL398S
Cabinet Type	Upright
Capacity(L)	398
Internal Size(W*D*H)mm	440*696*1266
External Size(W*D*H)mm	785*1041*1947
Package Size(W*D*H)mm	890*1165*2145
NW/GW(Kgs)	237/272

Performance

Temperature Range	-40~-86°C
Ambient Temperature	16-32°C
Cooling Performance	-86 °C
Climate Class	N
Controller	Microprocessor
Display	Touch screen

Refrigeration

Compressor	1pc
Cooling Method	Direct Cooling
Defrost Mode	Manual
Refrigerant	Mixture gas
Insulation Thickness(mm)	130

Construction

External Material	High quality steel plates with spraying
Inner Material	Galvanized steel sheet
Shelves	3(stainless steel)
Door Lock with Key	Yes
External Lock	Yes
Access Port	2pcs. Ø 25 mm
Casters	4+(2 leveling feet)
Data Logging/Interval/Recording Time	USB/Record every 1 minute / 365 days
Backup Battery	Yes

Alarm

Temperature	High/Low temperature,High ambient temperature
Electrical	Power failure
System	Sensor failure,Main board communication error,Built-in datalogger USB failure，Condenser overheating alarm,Door ajar,System failure

Electrical

Power Supply(V/HZ)	220-230~/50
Rated Current(A)	5

Accessory

Standard	Remote alarm contact
Options	Chart recorder, CO2 backup system, Printer