



-10°C -40°C Ultra Low Temperature Freezer

Refrigeration System

- Freon-free refrigerant, compressor supplied by an international famous brand and EBM fan can guarantee fast cooling and are energy-saving and environmentally friendly;
- Refrigerating circuit with proprietary intellectual property rights ensures high efficiency and stability;
- Two-layer heat insulating foamed door and the insulation design of the outer door system with multiple patents can prevent loss of refrigerating capacity in an effective way;
- Six sides of the cabinet are made from high-performance vacuum insulation material, improving thermal insulation performance to a large extent.

Temperature Control System

High-precision microcomputer temperature control system and platinum resistor temperature sensors ensure more precise temperature control.

People-oriented Design

High-quality steel plate structure with phosphate coating, stainless steel liner and low noise design can create a comfortable environment.



High-precision Temperature Control

- The digital temperature display can indicate operating status clearly;
- Independent control of double compressors can realize control of temperatures inside the upper chamber and the lower chamber separately;
- The high-precision microcomputer temperature control system enables users to set the temperature inside the cabinet within a range from -10°C to -40°C.



Refrigeration System

- Use of environmentally friendly Freon-free refrigerant and the double-compressor and double-system design enable users to set different temperatures separately and ensure fast refrigeration;
- The condenser installed on the bottom ensures temperature stability and system reliability;
- The CFC-free polyurethane foam technology and the thicker insulating layer can improve the effect of thermal insulation.



Alarm system

- The well-developed audible & visual alarm system makes it safer for storage;
- The turn-on delay and stopping interval protection function can ensure reliability in running;
- The door is equipped with a lock, improving security of sample storage.



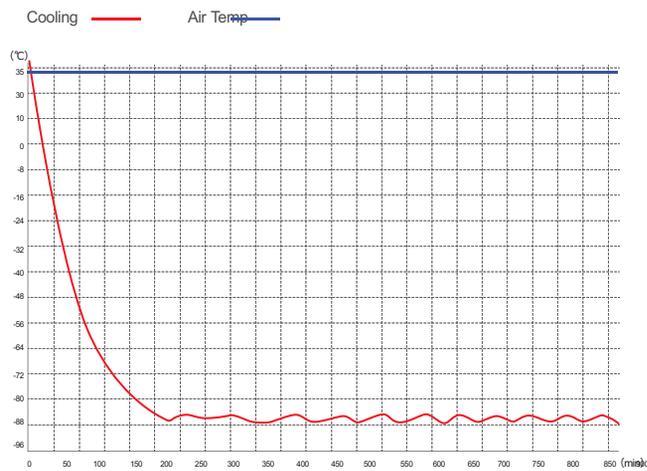
Human-oriented

- The arc angle-shaped door frame and cabinet design makes its appearance more attractive;
- The built-in door gasket is dustproof and easy to clean;
- Each of the refrigerating chamber and the freezing chamber is equipped with 6 drawers, which are convenient for storage of things.

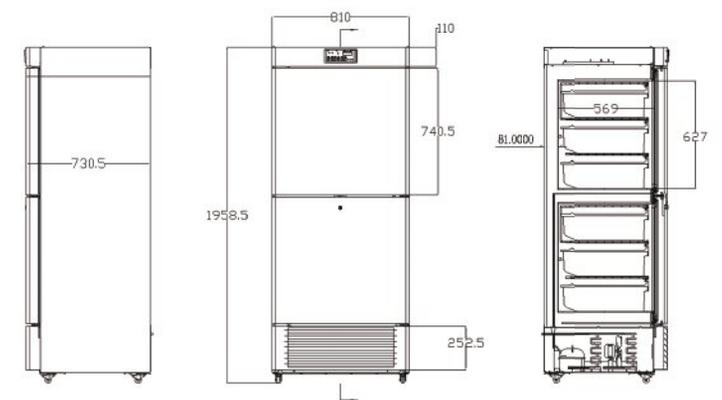
Scope of Application

Suitable for freezing of ice bars and storage of various things needing refrigerated storage such as blood plasma, reagent, etc. Suitable for use in hospitals, clinics, health and disease prevention systems, blood banks, laboratories in colleges & universities, the frozen food industry and catering industry, etc.

Performance Data / Cooling Curve



Eternal Dimension



Specification Chart

| -40℃ Ultra-low Temperature Freezer | |
|------------------------------------|---|
| Model | MC 450 |
| Cabinet Type | Upright |
| Capacity(L) | 439 |
| Internal Size(W*D*H)mm | (650*570*627)*2 |
| External Size(W*D*H)mm | 810*735*1960 |
| Package Size(W*D*H)mm | 895*820*2046 |
| NW/GW(Kgs) | 144/156 |
| Performance | |
| Temperature Range | -10~-40℃ |
| Ambient Temperature | 16-32℃ |
| Cooling Performance | -40℃ |
| Climate Class | N |
| Controller | Microprocessor |
| Display | Digital display |
| Refrigeration | |
| Compressor | 2pcs |
| Cooling method | Direct cooling |
| Defrost Mode | Manual |
| Refrigerant | R290 |
| Insulation Thickness(mm)mm | 80 |
| Construction | |
| External Material | Powder coated material |
| Inner Material | Aluminum plate with spraying |
| Drawer | 6*2(ABS) |
| Door Lock with key | Yes |
| Door | 2 |
| Access test port | 2 |
| Casters | 4(2 caster with brake) |
| Data Logging/Time/Quantity | USB/Record every 1 minute / 365 days |
| Door with heater | Hot gas heating |
| Alarm | |
| Temperature | High/Low temperature,High ambient temperature |
| Electrical | Power failure,Low battery ,Supply Error |
| System | Sennor error, USB datalog failure,Condenser high,Door ajar Main board communication error, |
| Electrical | |
| Power Supply(V/Hz) | 220/50, 220/60, 110/60 |
| Rated Power(W) | 460 |
| Input Power(W) | 840 |
| Current Consumption(KWh/24h) | 5.03 |
| Rated Current(A) | 3.85 |
| Options | |
| System | Printe,RS485,R232 |