# -86°C ULT Freezer

(Self-cascade Cooling System)

Model: MDF-86V50, 188E, 340E



### **Applications**

The -86°C ultra-low temperature freezers are designed for long term preservation of virus, germs, vaccines, biological tissues and organs, special food, medicines, reagents, etc.

#### **Features**

- Accurate temperature controller, setting temperature range is -40 ~ -86°C, accuracy is 0.1 °C.
- Suggested ambient temperature: +10~32°C.
- Insulated inner door to ensure good temperature uniformity.
- 304 SS inner chamber and round corner for friendly using and easy cleaning.
- Wide available voltage range: 187V~242V.

### **Security**

- Safety door lock and controller setting password to prevent unauthorized access.
- Build-in back-up battery to power control system for 72 hours when power failure (some model).
- Visual and audible alarm system: High/low temperature, power failure, sensor failure, door ajar, condenser clean, high ambient.
- Power failure protection: turn on delay of the cooling system after power failure.
- Controller error protection: the cooling system will remember the normal working cycle and keep working depending on this memory when controller or two sensors failed.

### **Humanized design**

- Casters with stopper for easy moving and fixation.
- Adjustable shelves for easy storing.
- Special designed service-free drainage system.
- Condenser clean alarm to remind the user to clean the freezer regularly (some model).

#### **Optional parts**

■ Test hole, Data logger, Chart recorder, LN2 back-up system, cold storage rack & box.



MDF-86V50



MDF-86V50(Open Door)



MDF-86V188E



MDF-86V188E(Open Door)







Handle and Lock Shelf and Test Hole Caster with Stopper

## **Specifications**

Model No.	MDF-86V50	MDF-86V188E	MDF-86V340E
Performance			
Temperature Range	-40 ~ -86°C		
Ambient Temperature	+10~32°C		
Controller	Microprocessor		
Display	Digital		
Noise	49.5 dB	52 dB	52 dB
Electrical Data			
Power Supply	220V/50Hz		
Rated Power	450 W	660 W	810 W
Electrical Current	3.1 A	4.3 A	5 A
Power Consumption	6.5 kWh/24h	8.2 kWh/24h	11.2 kWh/24h
Refrigeration System	<b>'</b>		
Compressor	SECOP * 1		
Refrigerant	Mixed Gas (Patented Technology)		
Cooling Type	Direct cooling		
Defrost Type	Manual		
Alarm			
High/Low Temperature	Υ	Υ	
High Ambient	/	Υ	
High/Low Voltage	/ Y		
Sensor Error	Υ	Υ	
Condenser Error	/ Y		
Door Ajar	/ Y		
Low Battery	/	/ Y	
Filter Clean	/ Y		
Dimensions			
Capacity	50 L	188 L	340L
Interior Size(W*D*H)mm	361×429×406	465×465×830	488×607×1140
Exterior Size(W*D*H)mm	540×620×1145	830×810×1607.5	854×1006×1907
Package Size(W*D*H)mm	690×760×1170	915×928×1818	935×1070×2128
N.t./G.t.(approx.)	75/95	207/222	268/288
Accessories			
Caster with Stopper	4		
Inner Door (Foamed)	1	3	2
Shelf (304 SS)	1	2	3
Test Hole	/	25mm * 1	
USB Port	/ 1		