

Smart Frequency Conversion ULT Freezer



DW-86L579/729/829/959BPT

Scope of Application

Suitable for long term storage applications and compliant with typical storage requirements found in hospitals, disease control and prevention centres, scientific research institutions, biomedical engineering institutes, the agriculture/fishery sector and also used to store special materials and other products within the electronics and chemicals industries.

Friendly Design

- Intelligent frequency conversion technology
- Low noise design
- Safe and secure
- Precise temperature control to ensure the cabinet temperature stability

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Product Parts



Smart Full-size Touch Screen

10 inch capacitive touch screen, state-of-art UI design coupled with sample management system to provide the optimal user experience



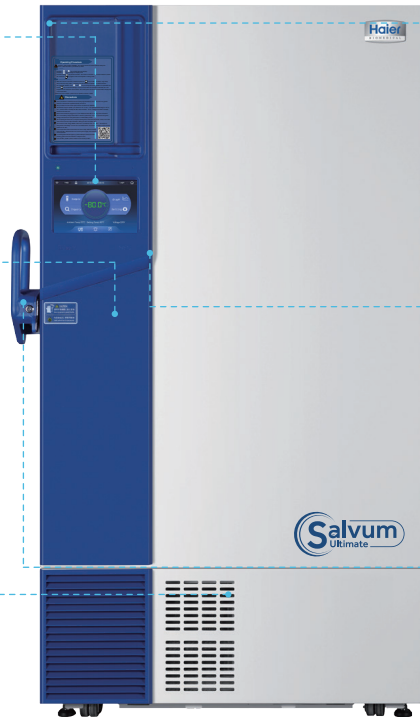
Pressure Equalisation Port

Heated port with spring assisted mechanism to prevent icing on the vent allows users to reopen the main door soon after entering. Adopts chromium plating, rust-proof



Energy Saving Refrigeration

High efficiency cooling fans and compressors, combined with hydrocarbon refrigerants, ensure energy savings and long-term sample security



DW-86L829BPT



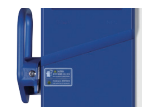
Multilayered Sealing Structure

Multilayered gaskets decrease heat loss and guarantee excellent warm up times in the event of a power failure



USB Interface

Enables users to download historical temperature data for compliance/auditing purposes



Improved Handle Design

Lockable handle with unique key prevents other Haier Biomedical freezer owner's access to your precious samples, also comes with space for a padlock for that extra security

Advanced Hardware System



Smart Full-size Touch Screen

10 inch capacitive touch screen, state-of-art UI design coupled with sample management system to provide the optimal user experience.



HC & Variable Frequency Drive Refrigeration System for Additional Energy Saving

Advanced innovative design delivers superior energy savings. The energy consumption is down to a single digit.

Product Accessories (Optional)



Temperature Recorder (Optional)

- Front-mounted.
- For independent temperature monitoring.

CO₂ Backup System

Advantage

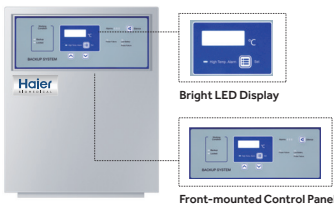
- Small footprint, light and easy for installation
- User adjustable temperature setting
- Simple to program and operate
- Flexible – Can be installed on any ULT freezer, which has a port hole
- The CO₂ injection pipe is designed in combination of filter, to prevent the blockage of CO₂ back-up system

Safety

- Liquid CO₂ test button to ensure the backup system is working
- Low CO₂ alarm system alerts the user when liquid CO₂ bottle is low in liquid level
- Ultra-low sound level compressors

Reliability


- Stainless steel covering, more elegant
- Stainless steel input pipe design, allows for flexibility and ease of cylinder positioning
- Durable battery lasts up to 48 hours

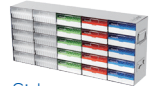


LN₂ Backup System

Features

- Interlocked design to turn off the LN₂ injection when the door is opened
- Protection circuit to prevent over-charging battery
- Light weight and portable design, suitable for installation on top of a freezer
- Alarm functions to include low battery and sensor error

Rack Type	ULT Freezer	Freezer Rack						Freezer Rack Quantity	Box Capacity
		CAT.NO.	Model	Material	Layout (Rows*Columns)	Box Type	Dimensions (D*W*H)(mm)		
 Sliding-drawer freezer rack	DW-86L579BPT	433001	(EXP) DCJ-55-B (SUS201)	SUS201	5*5	2 inch	686*141*291	16	400
	DW-86L729BPT							20	500
	DW-86L829BPT							24	600
	DW-86L959BPT							28	700
	DW-86L579BPT	433002	(EXP) DCJ-55-B (SUS304)	SUS304	5*5	2 inch	686*141*291	16	400
	DW-86L729BPT							20	500
	DW-86L829BPT							24	600
	DW-86L959BPT							28	700

Rack Type	ULT Freezer	Freezer Rack						Freezer Rack Quantity	Box Capacity
		CAT.NO.	Model	Material	Layout (Rows*Columns)	Box Type	Dimensions (D*W*H)(mm)		
 Side-access freezer rack	DW-86L579BPT	4330012	(EXP) DCJ-55-A (SUS304)	SUS304	5*5	2 inch	686*141*291	16	400
	DW-86L729BPT							20	500
	DW-86L829BPT							24	600
	DW-86L959BPT							28	700

Optional IoT Software System



Simplified Sample Management Experience

Optional barcode scanner for simple, effortless and precise identification. Input and retrieve your samples with higher precision and efficiency.



Wireless Monitoring Connectivity

Check the real-time operating status via mobile phones or portable tablet, simple and reliable.

A Quicker product access, identification and retrieval

Instead of a manual system, the one-gun, one-code and one-key operation plus touch screen synchronization means you can access and retrieve your samples within seconds.

B 24-hour sample protection

Using Haier Biomedical's app and IoT technology the unit can be monitored and can self-diagnose faults, ensuring you are always aware of your unit's status and able to make real-time and informed choices to protect your samples.

C Cloud data storage available

Store hundreds of millions of scientific research and sample information in the cloud server.

Friendly Design



Safe and Secure

Standard equipped with key lock, padlock and optional electromagnetic lock, fingerprint lock, providing multiple safeguards for sample safety.



Super Energy Efficient with Three Environmentally Friendly Innovations

Ultra-low power consumption, down to less than 10kWh/day, ensuring a world leading energy saving performance.



Low Noise

Special noise-reduction design plus super silent compressor technology and energy-saving fan, considerably lowers noise level.



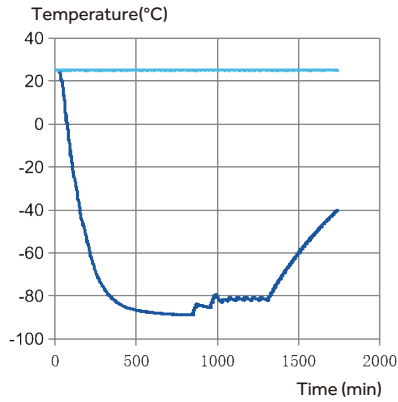
Optimized Insulation

Double foaming for both inner and outer doors and five-layer sealing design and optimized super-thick VIP thermal insulation technology, extends temperature holdover time during power failure and increases insulation efficiency by 20%.

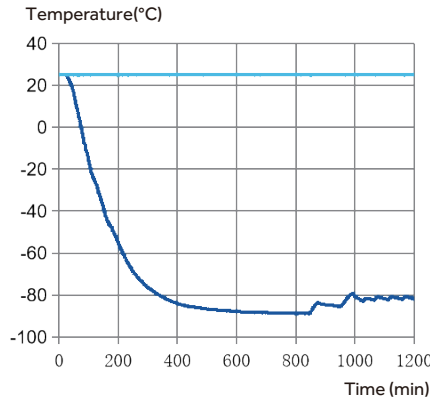
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Temperature Curve

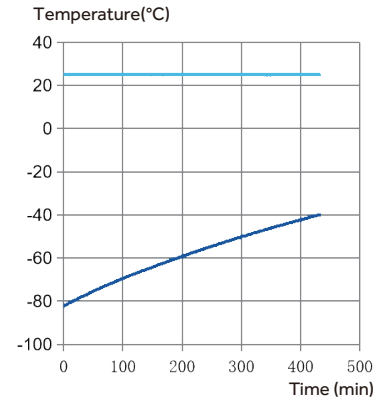
DW-86L959BPT Typical Performance Characteristics



Comprehensive Curve



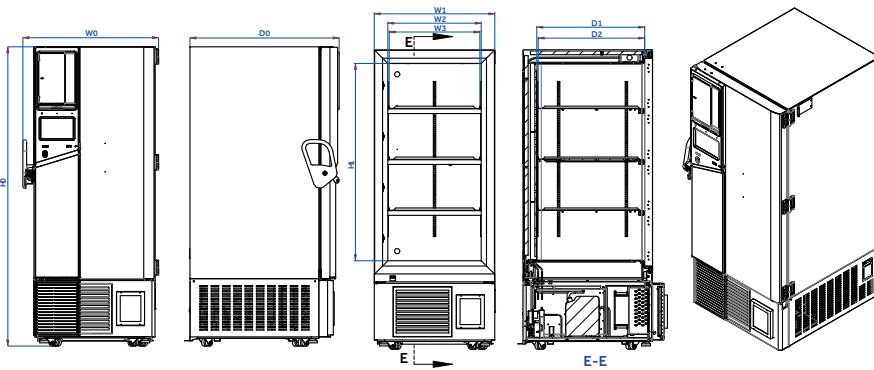
Temperature Cool Down Curve



Temperature Recover Curve

— Amb temp
— Cen temp

Product Dimensions



Parameter Description:

- W0--Overall width of the machine
- W1--Outer width of the cabinet
- W2--Inner liner width
- W3--Width of inner shelf
(Width of shelf for effective placement of freezing rack)
- D0--Overall depth of the machine
- D1-- Inner liner depth
- D2-- Inner depth of shelf
(Depth of shelf for effective placement of freezing rack)
- H0--Overall height of the machine
- H1--Inner liner height

Parameter	W0	W1	W2	W3	H0	H1	D0	D1	D2
DW-86L579BPT	895mm	800mm	620mm	602mm	1980mm	1310mm	998mm	716mm	706mm
DW-86L729BPT	1046mm	946mm	766mm	750mm	1980mm	1310mm	998mm	716mm	706mm
DW-86L828BPT	1145mm	1050mm	870mm	854mm	1980mm	1310mm	998mm	716mm	706mm
DW-86L959BPT	1296mm	1196mm	1016mm	1000mm	1980mm	1310mm	998mm	716mm	706mm

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Specifications



Model	DW-86L579BPT		DW-86L729BPT		DW-86L829BPT		DW-86L959BPT			
Technical Data	Cabinet Type	Upright		Upright		Upright		Upright		
	Climate Class	N		N		N		N		
	Cooling Type	Direct Cooling		Direct Cooling		Direct Cooling		Direct Cooling		
	Defrost Mode	Manual		Manual		Manual		Manual		
	Refrigerant	HC		HC		HC		HC		
	Sound Level (dB(A))	43.5		43.5		43.5		47		
Performance	Cooling Performance (°C)	-86		-86		-86		-86		
	Temperature Range (°C)	-40~-86		-40~-86		-40~-86		-40~-86		
Control	Controller	Microprocessor		Microprocessor		Microprocessor		Microprocessor		
	Display	LCD Touchscreen		LCD Touchscreen		LCD Touchscreen		LCD Touchscreen		
Electrical Data	Power Supply (V/Hz)	100-230/50/60		100-230/50/60		208-230/50/60 100-230/50/60		208-230/50/60 100-230/50/60		
	Max Power (W)	1100		1100		1400		1750		
Dimensions	Capacity (L/Cu.Ft)	579/20.4		729/25.7		829/29.2		959/33.9		
	Net/Gross Weight	kg	325/355		350/385		380/415		450/485	
		lbs	716.5/782.6		771.6/848.8		837.7/914.9		992.1/1069.2	
	Interior Dimension (W*D*H)	mm	620*716*1310		766*716*1310		870*716*1310		1016*716*1310	
		in	24.4*28.2*51.6		30.2*28.2*51.6		34.3*28.2*51.6		40.0*28.2*51.6	
	Exterior Dimension (W*D*H)	mm	895*998*1980		1046*998*1980		1145*998*1980		1296*998*1980	
		in	35.2*39.3*78.0		41.2*39.3*78.0		45.1*39.3*78.0		51.0*39.3*78.0	
	Packing Dimension (W*D*H)	mm	953*1071*2127		1105*1066*2117		1204*1072*2125		1365*1102*2164	
		in	37.6*42.2*83.8		43.6*42*83.4		47.5*42.3*83.7		53.8*43.4*85.2	
	Container Load (20'/40'/40'H)	12/24/24		10/20/20		8/20/20		8/16/16		
Alarms	High/Low Temperature	Y		Y		Y		Y		
	Hot Condenser	Y		Y		Y		Y		
	Power Failure	Y		Y		Y		Y		
	High/Low Voltage	Y		N		Y		Y		
	Sensor Error	Y		Y		Y		Y		
	Low Battery	Y		Y		Y		Y		
	High Ambient Temperature	Y		Y		Y		Y		
	Door Ajar	Y		Y		Y		Y		
	Start-up Delay	Y		Y		Y		Y		
Accessories	Caster	Y (4)		Y (4)		Y (4)		Y (4)		
	Leveling Feet	Y (2)		Y (2)		Y (2)		Y (2)		
	Porthole	2 rears, (25mm) diameter		2 rears, (25mm) diameter		2 rears, (25mm) diameter		2 rears, (25mm) diameter		
	Inner Doors	4		4		4		4		
	Shelves	3- stainless steel adjustable shelves		3- stainless steel adjustable shelves		3- stainless steel adjustable shelves		3- stainless steel adjustable shelves		
	Shelf Dimensions (W*D) (mm)	606*650		752*650		856*650		1002*650		
	Max. Load per Shelf (kg)	72		90		108		126		
	Freezer Racks Quantity (2" boxes)	16		20		24		28		
	Capacity (2" boxes)	400		500		600		700		
	USB Interface	Y		Y		Y		Y		
	Remote Alarm	Y		Y		Y		Y		
	5V Power Supply Port	Y		Y		Y		Y		
	Temperature Chart Recorder	Optional		Optional		Optional		Optional		
	RS232/485 Port	NA/Standard		NA/Standard		NA/Standard		NA/Standard		
CO ₂ Backup System	Optional		Optional		Optional		Optional			
LN ₂ Backup System	Optional		Optional		Optional		Optional			
Certifications	Certification	CE, UL, ENERGY STAR		CE, UL, ENERGY STAR		CE, ENERGY STAR UL, ENERGY STAR		CE, ENERGY STAR UL, ENERGY STAR		

Haier Biomedical reserves the right to change products and specifications without prior notice.