

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 as well as the electronics and chemical industries.

Friendly Design

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

Haier Biomedical & Laboratory Solutions America LLC

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Smart Frequency Conversion ULT Freezer





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.

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Optional 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.

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.



Wireless Monitoring Connectivity

Real-time monitoring with our U-Cool systems allows for simple and reliable tracking and has USB data exporting standard.

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

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%.







DW-86L959BPT Typical Performance Characteristics

Temperature(°C)

200

400

40

20

0

-20

-40

-60

-80

-100

0



600

800

1000 1200

Time (min)

Cen temp
Amb temp

Temperature(°C) 40 20 0 -20 -40 -60 -80 -100 500 0 100 200 300 400 Time (min)

Temperature Recover Curve

Product Dimensions <







Parameter Description:

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

Parameter Model	WO	W1	W2	W3	Но	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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Defrost Mode						
Definement		Manual	Manual	Manual	Manual	
Refrigerant		HC	HC	HC	HC	
Sound Level (dB(A))		43.5	43.5	43.5	47	
Cooling Performance (°C)		-86	-86	-86	-86	
Temperature Range (°C)		-40~-86	-40~-86	-40~-86	-40~-86	
Temperature Uniformity(°C)		±3	±3	±3	±3	
Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor	
Display		Touch Screen LCD	Touch Screen LCD	Touch Screen LCD	Touch Screen LCE	
Power Supply (V/Hz)		100~230/50/60	100~230/50/60	100~230/50/60	0/60 100~230/50/60	
Power (W)		1100	1100	1400	1750	
Electrical Current (A)		14	14	15	20	
Capacity (L/Cu.Ft)		20.4 cu ft (579L)	25.7 cu ft (729L)	29.2 cu ft (829L)	33.9 cu ft (959L)	
Net/Gross Weight (approx)	lbs	716.5/782.6	771.6/848.8	837.7/914.9	992.1/1069.2	
	kg	325/355	350/385	380/415	450/485	
Interior Dimension (W*D*H)	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)	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)	in	37.4*41.5*84.6	43.3*43.5*84.6	46.9*41.1*84.6	53.7*43.5*84.6	
		Y	Y	Y	Y	
Hot Condenser		Y	Y	Y	Y	
Power Failure		Y	Y	Y	Y	
High/Low Voltage		Y	Y	Y	Y	
Sensor Error		Y	Y	Y	Y	
Low Battery		Y	Y	Y	Y	
		Y	Y	Y	Y	
		Y	Y	Y	Y	
		Y	Y	Y	Y	
		Y	Y	Y	Y	
		Y		Y	Y	
		Y/2		Y/2	Y/2	
Shelves/Inner Doors					3/4	
					Y	
					Y	
					Y	
					Optional	
					Y	
					Optional	
					Optional	
				•	Y	
					Y	
	Controller Display Power Supply (V/Hz) Power (W) Electrical Current (A) Capacity (L/Cu.Ft) Net/Gross Weight (approx) Actual/Packaged Weight Interior Dimension (W*D*H) Exterior Dimension (W*D*H) Exterior Dimension (W*D*H) Packing Dimension (W*D*H) High/Low Temperature Hot Condenser Power Failure High/Low Voltage	Temperature Uniformity(°C)ControllerDisplayDisplayPower Supply (V/Hz)Power (W)Electrical Current (A)Electrical Current (A)IbsActual/Packaged Weight (approx) Actual/Packaged Weight (approx) Actual/Packaged Weight (approx) Matror Dimension (W*D*H)InPacking Dimension (W*D*H)inPower FailureinHigh/Low VoltageSensor ErrorLow BatteryIonHigh Ambient TemperatureIoor AjarStart-up DelayIonCasterFootPortholeShelves/Inner DoorsUSB InterfaceInRemote AlarmSV Power Supply PortSV Power Supply PortTemperature Chart RecorderSV Power Supply PortTemperature Chart RecorderRS485 PortCO2 Backup SystemLN2 Backup SystemLN2 Backup System	Temperature Uniformity(°C)±3ControllerMicroprocessorDisplayTouch Screen LCDPower Supply (V/Hz)100-230/50/60Power (W)1100Electrical Current (A)14Capacity (L/Cu.Ft)20.4 cu ft (579L)Net/Gross Weight (approx) Actual/Packaged WeightIbs716.5/782.6kgActual/Packaged Weightin25.2*39.3*78.0Packing Dimension (W*D*H)in35.2*39.3*78.0Packing Dimension (W*D*H)in35.2*39.3*78.0Packing Dimension (W*D*H)in35.2*39.3*78.0Packing Dimension (W*D*H)in35.2*39.3*78.0Packing Dimension (W*D*H)in100-230/50/60Packing Dimension (W*D*H)in100-230.3*78.0Packing Dimension (W*D*H)in100-230.3*78.0Power FailureYHigh/Low VoltageYSensor ErrorYHigh/Low VoltageYStart-up DelayYCasterYPortholeY/2Shelves/Inner Doors3/4USB InterfaceYRemote AlarmYSV Power Supply PortYTemperature Chart RecorderOptionalRS485 PortYCO ₂ Backup SystemOptionalLN ₂ Backup SystemOptionalULY	Temperature Uniformity(*C) ± 3 ± 3 ControllerMicroprocessorMicroprocessorDisplayTouch Screen LCDTouch Screen LCDPower Supply (V/Hz)100-230/50/60100-230/50/60Power (W)11001100Electrical Current (A)1414Capacity (L/CuFt)20.4 cu ft (579L)25.7 cu ft (729L)Net/Gross Weight (approx)lbs716.5/782.6771.6/848.8Actual/Packaged Weightkg325/355350/385Interior Dimension (W*D*H)in35.2*39.3*78.041.2*39.3*78.0Packing Dimension (W*D*H)in37.4*41.5*84.643.3*43.5*84.6High/Low TemperatureYYHot CondenserYYPower FailureYYHigh/Low VoltageYYSensor ErrorYYUow BatteryYYHigh Ambient TemperatureYYYYYCasterYYPortholeY/2Y/2Shelves/Inner Doors3/43/4US InterfaceYYRemote AlarmYYStart-up DelayYYShelves/Inner Doors3/43/4US InterfaceYYRemote AlarmYYStart-up DelayYYStart-up DelayYYRemote AlarmYYRemote AlarmYYStart-up DelayYYStart-up	Temperature Uniformity(*C) ± 3 ± 3 ± 3 ControllerMicroprocessorMicroprocessorMicroprocessorDisplayTouch Screen LCDTouch Screen LCDTouch Screen LCDPower Supply (V/Hz)100-230/50/60100-230/50/60100-230/50/60Power (W)110011001400Electrical Current (A)141415Capacity (L/Cu,Ft)20.4 cu ft (579L)25.7 cu ft (729L)29.2 cu ft (829L)Net/Gross Weight (approx)lbs716.5/782.6771.6/848.8837.7/914.9Actual/Packaged Weightkg325/355350/385380/415Interior Dimension (W*D*H)in35.2*39.3*78.041.2*39.3*78.045.1*39.3*78.0Packing Dimension (W*D*H)in37.4*41.5*84.643.3*43.5*84.646.9*41.1*84.6High/Low VoltageYYYYPower FailureYYYYHigh Ambient TemperatureYYYHigh Ambient TemperatureYYYJoor AjarYYYYCasterYYYYPortholeY/2Y/2Y/2Shelves/Inner Doors3/43/43/4Sy Power Supply PortYYYYRemote AlarmYYYYOptionalOptionalOptionalOptionalIbis Assex PortYYYYIbis Assex PortYYYIbis Assex Po	

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