



Safe, Secure and Reliable



Environmentally Friendly



High Performance in Temperature Uniformity



World-leading Energy Saving Refrigeration Technology

Qingdao Haier Biomedical Co.,Ltd.















TwinCool Frequency Conversion ULT

The Twincool Frequency conversion range of freezers utilize two key innovations to delivery outstanding sample security and energy efficiency - dual cooling and adaptive refrigeration technologies.





Product Advantages





Safe, Secure and Reliable

Multiple alarms, including high and low temperature, power failure, door ajar, hot condenser, low battery, sensor error, and $% \left(1\right) =\left(1\right) \left(1\right) \left$ high ambient temperature.

The standard ambient temperature ranges from 10 to 32°C and can be applied to the ambient temperature of 38°C for an extended period of time.



Environmentally Friendly

HC refrigerants have zero Global Warming Potential (GWP) and the LBA polyurethane foam has lower GWP than most HFC commonly used, combined they deliver a superior environmental protection.



High Performance in Temperature Uniformity

The unique frequency conversion refrigeration system ensures excellent temperature stability.



World-leading Energy Saving RefrigerationTechnology

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



Dual Refrigeration System Double Safety and Optimal Reliability

Double independent hydrocarbon refrigeration system design, each system can maintain -80°C ensuring the safety of stored samples.

Ergonomic Design (



- Leveling Feet and Casters
- Adjustable Shelves
- Document Holder
- Easy to Remove Filter Cover
- Heated Pressure Equalization Port
- Robust Handle Design with Lock and Unique Key

Intelligent Control

10.1-inch high-performance touch screen, sensitive touch operation. Users can view operating status, and historical temperature data and alarm events. With the optional IoT module users can check the status and alerts in real-time.

Minimal Sound Level Output

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





DW-86L578BPST





Specifications ()

Model		DW-86L828BPST	DW-86L728BPST	DW-86L578BPST	
Technical Data	Cabinet Type		Upright	Upright	Upright
	Climate Class		N	N	N
	Cooling Type		Direct cooling	Direct cooling	Direct cooling
	Defrost Mode		Manual	Manual	Manual
	Refrigerant		HC	HC	HC
	Sound Level (dB(A))		42	42	42
Performance	Cooling Performance (°C)		-86	-86	-86
	Temperature Range (°C)		-40~-86	-40~-86	-40~-86
Control	Controller		Microprocessor	Microprocessor	Microprocessor
	Display		LCD	LCD	LCD
Electrical Data	Power Supply (V/Hz)		100~230/50/60Hz	100~230/50/60Hz	100~230/50/60Hz
	Power (W)		720	680	710
	Max Power Draw (W)		1400	1100	1100
	Electrical Current (A)		13	10.4	10.4
	Power Consumption(kWh/24h) (set -75°C at 25°C ambient)		8.06	7.0	6.0
Dimensions	Capacity (L/Cu.Ft)		828/29.2	728/25.7	578/20.4
	Net/Gross Weight	kg	380/410	350/385	325/355
		lbs	837.7/914.9	771.6/848.8	716.5/782.6
	Interior Dimension (W*D*H)	mm	870*716*1310	766*716*1310	620*716*1310
		in	34.3*28.2*51.6	30.2*28.2*51.6	24.4*28.2*51.6
	Exterior Dimension (W*D*H)	mm	1145*998*1980	1046*998*1980	895*998*1980
		in	45.1*39.3*78.0	41.2*39.3*78.0	35.2*39.3*78.0
	Packing Dimension (W*D*H)	mm	1190*1045*2150	1100*1105*2150	950*1055*2150
		in	46.9*41.1*84.6	43.3*43.5*84.6	37.4*41.5*84.6
	Cabinet Width (without handle and hinge)	mm	1050	946	800
	Container Load (20'/40'/40'H)		8/20/20	10/20/20	12/24/24
Functions	High/Low Temperature		Y	Y	Y
	Hot Condenser		Y	Y	Y
	Power Failure		Y	Y	Y
	High/Low Voltage		Υ	Υ	Y
	Sensor Error		Y	Y	Y
	Low Battery		Υ	Υ	Y
	High Ambient Temperature		Υ	Υ	Y
	Door Ajar		Y	Υ	Y
	Start-up Delay		Y	Y	Y
Accessories	Caster		Y	Y	Y
	Foot		Y	Y	Y
	Porthole		Y/2	Y/2	Y/2
	Shelves/Inner Doors		3/4	3/4	3/4
	USB Interface		Y	Y	Y
	Remote Alarm		Y	Y	Y
	5V Power Supply Port		Y	Y	Y
	Temperature Chart Recorder		Optional	Optional	Optional
	RS232/485 Port		NA/Standard	NA/Standard	NA/Standard
	CO₂ Backup System		Optional	Optional	Optional
	LN₂ Backup System		Optional	Optional	Optional
Other	Certification		CE	CE/UL	CE/UL