

Ultra Low Temperature Deep Freezer

BioFreezing Technology



°FAHRENHEIT. °CELSIUS. °DARSUN.

Specification

Temperature Control System

Controlled by micro-computer, LCD display touched screen; USB & RS485 data port for downloading the data.
The inner temperature can be adjusted at the range of -40°C-86°C, the temperature regulation accuracy is 0.1°C.

Security Control System

Multi malfunction alarms: high temperature alarm, low temperature alarm, sensor malfunction alarm, condenser dirty alarm, low battery alarm, power failure alarm, over pressure alarm, over ambient temperature alarm, open the door alarm and so on for safe use;
Besides, you can check history alarming information and derive data. all the history data can be saved over 10 years;

Three alarming methods: buzzer alarming, independent loon alarming, and remote alarming;

Protection function: compressor power-on delay protection, time between power off; overpressure protection, password protection and normal operation protection under failure mode;

Password protection can prevent parameters from being changed randomly;

Display screen with running indication and communication status indication can show real-time operation of the freezer;

The power switch has two-way fuse over-current protection, together with the power-on indicator light ensure safety. Refrigeration System

Optimized cascade refrigeration technology, special evaporation system and condensation system, strong refrigerating efficiency;

International famous brand compressor and EBM fan electromotor and oil separator, stable product performance, strong refrigerating efficiency;

Enhanced sealing design: double door seal;

Heating-free pressure-balanced valve (patent), easy to open the door, keep The cold at and avoid the freezer on fire.

Humanized Design

Unique handle design: the door can be opened by both hands, individual press lock on the handle and 2 padlocks;

Wide voltage design can help it work stably under 198-254V;

Can show the temperature curve and history data, and have derive data function;

Press-out type dust removal cover with locks, simple and convenient for maintenance;

Thermometer holes design for temperature examination.

Features



Optimal Energy Efficient Performance

HC refrigerant, frequency conversion technology and optimized structural design combine to lower operating costs compared to previous generation by up to 50%.



Significantly Enhanced Performance

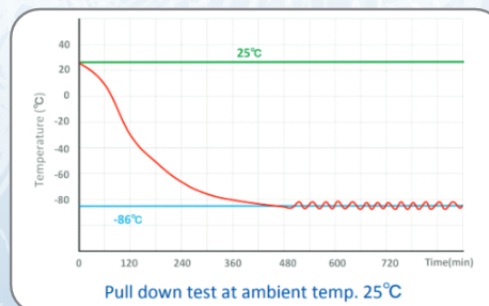
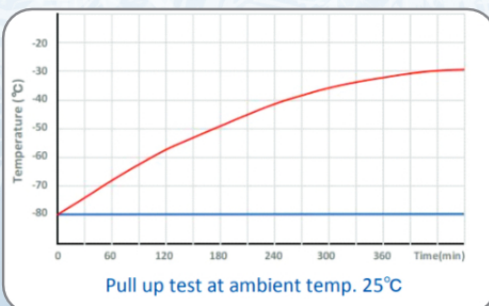
Darsun ULT series features lower energy consumption, a longer holdover time, faster temperature recovery time and re-entry time, as well as reduced noise.



Green and Environmental Friendly

Naturally occurring Hydrocarbon (HC) refrigerants and insulation materials with ultra-low global warming potential (GWP) levels exert an extremely minimal impact on the environment.

Super-stable Cooling System



Upright freezers with flexible loading options



Racks with drawers for upright freezers



The data logger can be fixed to deep-freezers magnetically and configured or read via a USB interface



Darsun deep-freezers are characterized by first-class craftsmanship and high flexibility



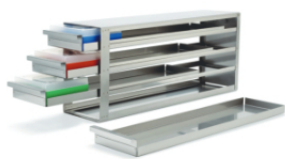
Application-oriented space utilization solutions provide increased variability and user-friendliness



Flexible combinations of drawers, inner compartments and special solutions for specific requirements



Accessories



Front sliding rack



Side sliding rack



Chest rack



Co2 / Ln2 Backup System



Ice Scraper



Cryo Gloves

Technical Specifications

Basic	Model No	DS-86L-435T		DS-86L-565T	DS-86L-705T
	Cabinet Type	Upright			
Technical Parameter	Shelf	3		3	4
	Door	4		4	5
	Cooling Type	Direct Cooling			
	Ground Clearance (mm)	100/128			
	Temperature Performance	-86°C			
	Refrigerant	R290 / R170			
	Power Consumption(kWh/day)	7.5 kwh		7.5 kwh	10 kwh
	Power (W)	1300		1450	1600
	Noise Level(db)	52			
	Ambient Temperature (C)	10°C-45°C			
Temperature	Temperature Range (C)	-40°C~ -86°C			
	Compressor	1hp x 2			
Controller	Temperature Uniformity	±3°C			
	Temperature Controller	Microprocessor LCD display touched screen with 0.1 °c/1°C increment			
	Sensor Type	PT100/PT1000			
Electronic parameter	Voltage / Frequency	220V/50Hz			
	Heat Output(W)	322		335	375
	Electricity (A)	7		7	7
	Capacity (L)	437		567	707
Size	Net/Gross Weight(Kg)	300/330		317/350	359/350
	Packing Size (W*D*H)mm	875x1144x2100		1005x1144x2100	1155x1144x2100
	Outer Size (W*D*H)mm	790x1070x1990		920x1070x1990	1070x1070x1990
	Inner Size (W*D*H)mm	460x720x1310		590x720x1310	740x720x1310
Alarm & System	High / Low Temperature	Y			
	Power O?	Y			
	Abnormal Voltage	Y			
	Sensor Malfunction	Y			
	Filter Check	Y			
	Temp. Controller Malfunction	Y			
	Battery Backup Malfunction	Y			
	Co2 Backup	Optional			
	Cryo racks/Cryo box	Optional			
	Ambient Temperature	Y			
Connectivity	Door Ajar	Y			
	Test Hole/Diameter	1/25mm			
	Foot	Y			
	USB Port	Y			
Utility & certificates	Remote Alarm Contact	Y			
	RS232/485 Port (4 -20ma Output) Dry Contacts	Y			
	Castor	Y			
	Certification	ISO9001, CECertified, FDA, IEC60601-1 & IEC61010-1			

Model	Plan	Freezer Rack Model	Plan	Freezer Rack Quantity Unit		Cryogenic Box Quantity unit		Cryogenic vial Quantity Unit (2ml)	
				Spec	Quantity	Spec (Standard)	Quantity	9x9 grid	10x10 grid
DS-86L-435T	A	DS-56-CQ-437	Side Type	5x5	12	2 inch	300	24300	30000
	B	DS-55-CT-437	Drawer Type	5x5	12		300	24300	30000
DS-86L-565T	A	DS-56-CQ-567	Side Type	5x5	16	2 inch	400	32400	40000
	B	DS-56-CT-567	Drawer Type	5x5	16		400	32400	40000
DS-86L-705T	A	DS-56-CQ-707	Side Type	5x5	20	2 inch	500	40500	50000
	B	DS-56-CT-707	Drawer Type	5x5	20		500	40500	50000



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