-40°C Low Temperature Deep Freezer

High-efficiency compressor with rapid refrigeration

Featuring a double-seal structure with excellent insulation to minimize temperature loss and a heated door frame that prevents frost buildup around the seal, this freezer ensures a conducive environment for all forms of research, storage and testing

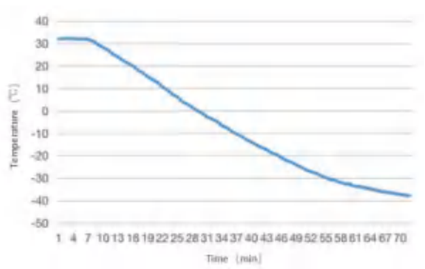
Widely used in electronic and chemical laboratories, hospitals, blood banks, scientific research institutions, and disease control centers for low-temperature testing of electronic components and special materials, as well as the storage of plasma, biological samples, vaccines, and other temperature-sensitive materials.

Economical Model



DW-40W102/233/300/390/828

DW-40W300 cooling curve



Product Advantages

Precise Temperature Control

Microprocessor controlled system allows temperature control accuracy up to ±0.1°C, adjustable internal temperature ranging from -20°C to -40°C with uniform temperature distribution

Safety

Various essential alarms: High/low temperature alarm, sensor error alarm, power failure alarm

Refrigeration

Environmentally friendly CFC-free refrigerant with forced cooling

Secure and Reliable Operation

Equipped with a safety lock, wide voltage compatibility, and 48-hour temperature display battery life after power loss for enhanced security and monitoring.

Thermal Insulation

Thick insulation layer with advanced microcellular foaming technology ensures excellent thermal retention

Product Parameters

Model			DW-40W102	DW-40W233	DW-40W300	DW-40W390	DW-40W828
Technical Data	Cabinet Type		Chest	Chest	Chest	Chest	Chest
	Climate Class		SN	SN	SN	SN	SN
	Cooling Type		Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling	Direct Cooling
	Defrost Mode		Manual	Manual	Manual	Manual	Manual
	Refrigerant		HC	HC	HC	HC	HC
	Sound Level (dBA)		47.8	49.3	52.5	51.1	56.1
Performance	Temperature Range (°C)		-20~-40	-20~-40	-20~-40	-20~-40	-20~-40
Control	Controller		Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Display		LCD	LCD	LCD	LCD	LCD
Electrical Data	Power Supply (V/Hz)		~220/50	~220/50	~220/50	~220/50	~220/50
	Power (W)		345	360	575	570	878
	Electrical Current (A)		2.6	4.2	/	/	/
Dimensions	Capacity (L/Cu. Ft)		102/3.6	233/8.23	300/10.59	390/13.77	828/29.24
	Net/Gross Weight (approx)	(kg)	55/62	53/62	64/74	74/85	148/162
		(lbs)	121.3/136.7	116.8/136.7	141.1/163.1	163.1/187.4	326.3/357.1
	Interior Dimension (W×D×H)	(mm)	426×386×603	789×504×678.5	985×504×678.5	1247×504×678.5	2275×508×755
		(in)	17.1×15.2×23.7	31.1×19.8×26.7	38.8×19.8×26.7	49.1×19.8×26.7	89.6×20.0×29.7
	Exterior Dimension (W×D×H)	(mm)	594×645×1036	954×745×838	1154×710×838	1412×710×838	2415×740×903
		(in)	23.4×25.4×40.8	37.6×29.3×33.0	45.4×28.0×33.0	55.6×28.0×33.0	95.1×29.1×35.6
	Packing Dimension (W×D×H)	(mm)	667×676×1164	1030×790×945	1226×790×945	1488×790×945	2493×778×990
		(in)	26.3×26.6×45.8	40.6×31.1×37.2	48.3×31.1×37.2	58.6×31.1×37.2	98.1×30.6×39.0
	20GP/40GP/40HQ		48/108/108	28/60/60	22/48/48	20/46/46	12/16/24
Alarms	High/Low Temperature		Y	Y	Y	Y	Y
	Remote Alarm		N	N	N	N	N
	Power Failure		Y	Y	Y	Y	Y
	Sensor Error		Y	Y	Y	Y	Y
	Low Battery		N	N	N	N	N
	High Ambient Temperature		N	N	N	N	N
	Door Ajar		N	N	N	N	N
Accessories	Castor Wheels		Y	Y	Y	Y	N
	Static Foot		N/A	N/A	N/A	N/A	N/A
	Service Port/Quantity		Y	Y	Y	Y	Y
	Drawers/Inner Doors (Quantity)		0/1	0/1	0/1	0/1	0/1
	USB Interface		N	N	N	N	N
	Temperature Recorder		N	N	N	N	N
Other	Certifications		N	N	N	N	N
Operational Performance	Temperature Setting Mode		Digital (Accuracy ±1°C)	Digital (Accuracy ±1°C)	Digital (Accuracy ±1°C)	Digital (Accuracy ±1°C)	Digital (Accuracy ±1°C)
	Temperature Sensor		Thermistor	Thermistor	Thermistor	Thermistor	Thermistor
	Power Consumption (kWh/24h)		3	3.48	6	6	12

Product Parameters

Model		DW-40W102	DW-40W233	DW-40W300	DW-40W390	DW-40W828
Material & Build	Exterior Material	SPCC powder coated Cold rolled steel	SPCC powder coated Cold rolled steel	SPCC powder coated Cold rolled steel	SPCC powder coated Cold rolled steel	SPCC powder coated Cold rolled steel
	Interior Material	Embossed aluminum plate	Embossed aluminum plate	Embossed aluminum plate	Embossed aluminum plate	Pre-coated aluminum plate
	Insulation	Cyclopentane Foaming Agent	Cyclopentane Foaming Agent	Cyclopentane Foaming Agent	Cyclopentane Foaming Agent	Cyclopentane Foaming Agent
	External Door/Quantity	Foam door/1	Foam door/1	Foam door/1	Foam door/1	Foam door/2
	Sealing Strip	Single Sealing Strip	Single Sealing Strip	Single Sealing Strip	Single Sealing Strip	Single Sealing Strip
	External Door Sealing Type/ Quantity	Foam Rubber/1	Foam Rubber/1	Foam Rubber/1	Foam Rubber/1	Foam Rubber/2
	Padlock Latch	N	N	N	N	N
	Built-in Key Door Lock/Quantity	Y/1	Y/1	Y/1	Y/2	Y/2
	Inner Door	N	N	N	N	N
Product Accessories	Storage Basket	1	1	1	2	5
	Caster Wheels	N	N	N	N	N
	Drawer	N	N	N	N	N
Compressor Data	Compressor Brand	HUAYI	SECOP	HUAYI	HUAYI	SECOP
	Compressor Type	NFG70NA	NL7CLX	NFG80NA	NFG80NA	SC21CL
	Compressor Power (W)	95	95	163	163	224
	Compressor Quantity	1	1	1	1	1
	Refrigerant Type	R290	R404a	R290	R290	R404a
Function Parameters	Alarm System	Y	Y	Y	Y	Y
	Temperature Alarm	N	N	N	N	N
	Filter Dirty Alarm	N	N	N	N	N
	Excess Voltage Alarm	N	N	N	N	N
	Boot Delay Protection	Y	Y	Y	Y	Y
	Password Protection	Y	Y	Y	Y	Y
Evaporator	Type	Evaporator coil	Evaporator coil	Evaporator coil	Evaporator coil	Evaporator coil
	Material	Copper tube	Copper tube	Single layer galvanized welded pipe	Single layer galvanized welded pipe	Copper tube
Condenser	Type (Forced Cooling)	Tube-and-Shell condenser	Tube-and-Shell condenser	Tube-and-Shell condenser	Tube-and-Shell condenser	Tube-and-Shell condenser
	Material (Forced Cooling)	Electrophoretically coated fin-tube	Electrophoretically coated fin-tube	Electrophoretically coated fin-tube	Electrophoretically coated fin-tube	Electrophoretically coated fin-tube
	External Fan	Y	Y	Y	Y	Y
	Internal Temperature Uniformity	≤3°C	≤3°C	≤3°C	≤3°C	≤3°C
	Internal Temperature Accuracy	±1°C	±1°C	±1°C	±1°C	±1°C

Model		DW-40W102	DW-40W233	DW-40W300	DW-40W390	DW-40W828
Condenser	Cooling Speed (mins): (From ambient 25°C to -40°C)	≤240	≤240	≤240	≤240	≤240
	Holdover time (mins): (From -40°C to -20°C @ ambient 25°C)	80~240	80~240	80~240	80~240	80~240
	Backup Battery	N	N	N	N	N
Others	Building Supply Rating (A)	10	10	10	10	10
	Power Cable Length (m)	2.5	2.5	2.5	2.5	2.5
	Heat Transfer Rate (BTU/hr)	242	242	413	413	565
	Operating Ambient Temperature (°C)	10°C~32°C	10°C~32°C	10°C~32°C	10°C~32°C	10°C~32°C
	Compressor Capacity (W)	147	147	250	250	341
	Controller Position	Top	Top	Top	Top	Top
	Power Switch/ Manual Reset Overcurrent Protector	/	/	/	/	/
	Controller Type	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
	Setpoint Lock	Y	Y	Y	Y	Y
	Controller Sensor Type	NTC	NTC	NTC	NTC	NTC
	Remote Alarm Terminal	N	N	N	N	N
	Adjustable High/Low Temp Alarms	Y	Y	Y	Y	Y
	Automatic Voltage Protection	N	N	N	N	N
	Door Thickness (mm)	46	42.5	42.5	42.5	46
	Wall Thickness (mm)	82	80.5	80.5	80.5	70
	External Fan Brand	EBM	EBM	EBM	EBM	EBM
	Casters	Y/4, Universal wheel	N	N	N	N
	Condenser Type	Wire tube condenser	Wire tube condenser	Wire tube condenser	Wire tube condenser	Wire tube condenser
	Internal Fan	N	N	N	N	N
	Alarm Battery	N	N	N	N	N
	Temperature Uniformity (°C)	≤3	≤3	≤3	≤3	≤3
	Temperature Accuracy (°C)	1	1	1	1	1