

-40°C Biomedical Freezer



MD-40L308



Precise Temp. Control

Microcomputer Temperature Control System, temperature accuracy 0.1°C.



Super & Even Cooling

Rapid Cooling(25°C→-40°C):180mins & ≤3.9°C Uniformity.



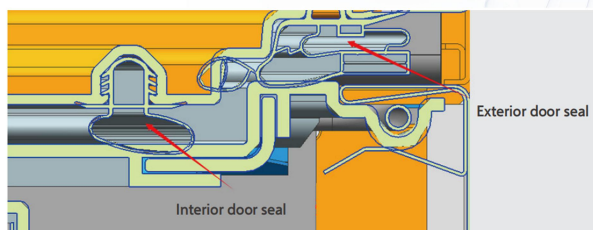
Eco-Cool Refrigerant

R290 (natural hydrocarbon, low-GWP) refrigerant ensures zero ozone depletion and lower climate impact .

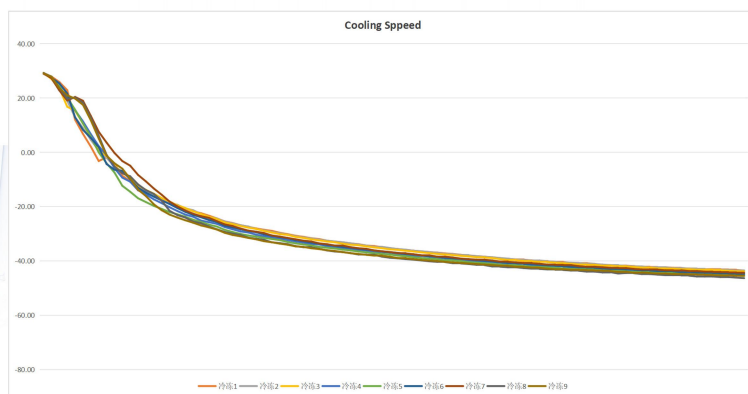
LCD Temperature Control Systems



Three-dimensional seal

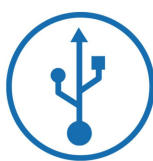


Cooling Speed(Ambient 25°C)



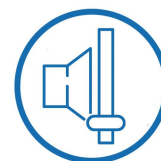
Safety Lock

Lockable door with key



USB Interface

RS-485(Optional)



Low Noise

60dB(A) 115~V/60Hz
52dB(A) 220-240~V/50Hz
48dB(A) 220-240~V/60Hz



Multiple Alarms

Audible & Visual Alarms, Remote Alerts, High/Low Temperature Warnings, Door Ajar Detection, Power Failure Alert, Ambient Temperature Deviation, and Sensor Malfunction Monitoring



Backup Battery

Maintains alarms for 20 hours during power failure



Wheels

4 Swivel Casters + 2 Leveling Feet

Application, Rating, & Electrical Data	
Application	Biomedical freezer
Storage Volume (L/Cu.Ft)	308/10.88
Temperature Range	-20 C ~-40 C
Default Set Point	-40 C
Power	115~V/60Hz 220-240~V/50Hz 220-240~V/60Hz
Current	3A 1.3A 2.9A
Power Cord Length	1.7m
Certification	CE/UL/FDA
Door type	Solid door
Application Environment	Non-corrosive, non-flammable, non-explosive
Ambient Operating Temperature	10°C-32°C

Refrigeration	
Refrigeration System	Direct cooling
Compressor	Hermetic, fixed frequency
Condenser Type	Built in + micro channel condenser
Expansion Device	Capillary tube
Evaporator Type	Shelf type evaporator
Defrost Method	Manual defrost
Refrigerant	R290

Controller / Configuration Settings	
Display screen	LCD
Controller Type	Microprocessor
Security	Lockable door, protected settings
Control Sensor	NTC
Communication Ports	USB, Remote alarm contacts
Power Failure Alarm	Yes
High/Low Alarms	Yes, fully adjustable
Door Ajar Alarm	Yes
Download	Yes, via USB, PDF
Temperature Log	Yes, download via USB

Performance Characteristics (normal operating conditions)	
Uniformity (°C)	≤3.9 C
Energy consumption (kWh/day)	2.4 2.7 2.4
Noise emission (dB)	60 52 48
Pull-down time to -40°C (min)	180

Typical Temperature Map

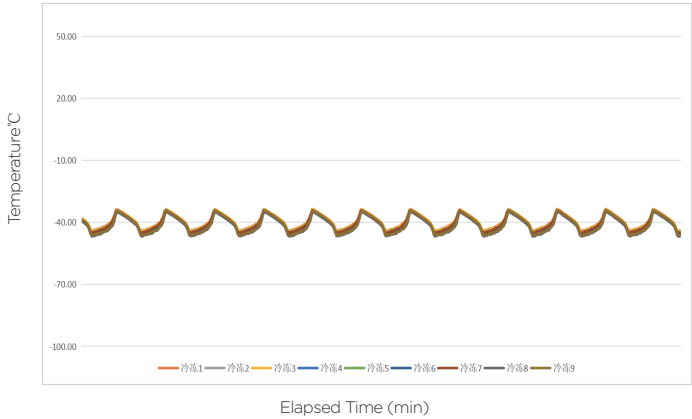
Fre	test 1	test 2	test 3	test 4	test 5	test 6	test 7	test 8	test 9
Avg	-39.41	-39.54	-39.59	-40.55	-40.96	-40.63	-40.09	-41.48	-40.86
Max	-33.50	-33.60	-33.60	-34.20	-34.60	-34.60	-34.00	-34.80	-34.10
Min	-44.10	-44.30	-44.40	-45.60	-46.10	-45.50	-45.00	-46.90	-46.30

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Midea Biomedical reserves right to interpret the data.

Dimensions and Construction	
Interior (w*d*h)	540*450*1277 mm
Exterior (w*d*h)	700*690*1920 mm
Access Port	Two test ports, one fitted with a pressure relief valve, cannot be used as test ports. (25 mm diameter)
Shelves	7 18 kg max capacity
Wheels	4 Swivel Casters + 2 Leveling Feet
Net Weight	102 kg
Gross Weight	114 kg

All performance data from 308L biomedical freezer, 25 ambient, -40°C

Uniformity



Cooling Speed

