-40℃ Biomedical Freezer

Midea Biomedical



MD-40L518

Precise Temp. Control

Microcomputer Temperature Control System, temperature accuracy 0.1℃.

Super & Even Cooling

180 mins Rapid Cooling(25°C→-40°C)& ≤3 Uniformity.

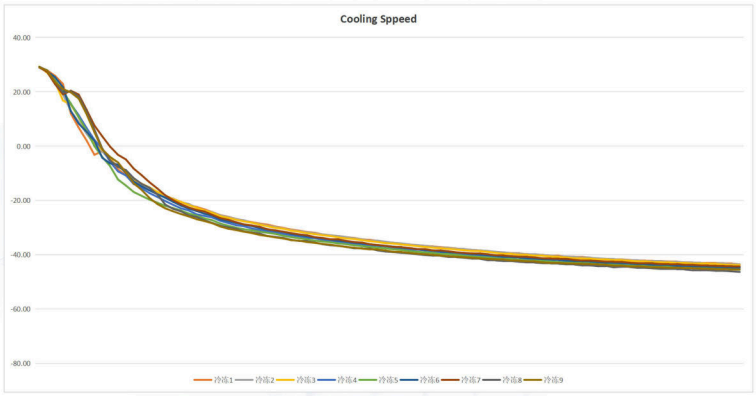
Eco-Cool Refrigerant

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

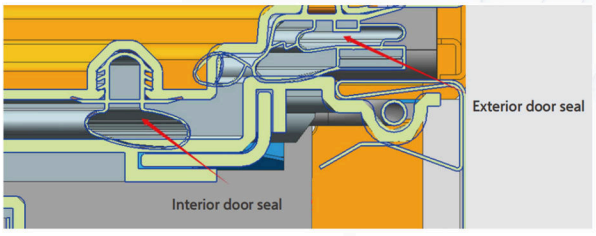
Two independent cooling system



Cooling Speed(Ambient 25℃)



Three-dimensional seal



Safety Lock

Lockable door with key

USB Interface

RS-485(Optional)

Low Noise

65dB(A) 115~V/60Hz
58dB(A) 220-240~V/50Hz
58dB(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

Midea Biomedical

Midea Biomedical, Hefei City, China
www.mideabiomedical.net

Technical Data Sheet
High-Performance, Biomedical Freezer
Model: MD-40L518

Application, Rating, & Electrical Data

Application	Biomedical freezer
Storage Volume (L/Cu.Ft)	518/18.29
Temperature Range	-20℃~-40℃
Default Set Point	-40℃
Power	115~V/60Hz | 220-240~V/50Hz |220-240~V/60Hz
Current	5.1A | 5A | 4A
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	Two independent cooling system
Compressor	Hermetic, fixed frequency
Condenser Type	Built in + micro channel condenser
Expansion Device	Capillary tube
Evaporator Type	Shelf evaporator
Defrost Method	Manual defrost
Refrigerant	R290

Controller / Configuration Settings

Display screen	LED
Controller Type	Microprocessor
Security	Lockable door, protected settings
Control Sensor	NTC
Communication Ports	USB, Remote alarm contacts
Power Failure Alarm	Yes,each freezer chamber can be set separately
High/Low Alarms	Yes, fully adjustable
Door Ajar Alarm	Yes,each freezer chamber has Individual Alarm
Download	Yes, via USB, PDF
Temperature Log	Yes, download via USB

Performance Characteristics (normal operating conditions)

Uniformity | (℃)	≤3℃
Energy consumption | (kWh/day)	4.2
Noise emission | (dB)	65 | 54 | 58
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

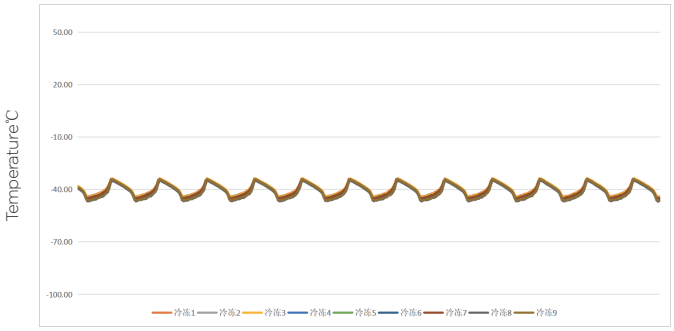
Midea Biomedical,Trademarks are the property of their respective owners. Drawings are not for engineering use, and specifications may change. Not all products are available in all countries, so please check with your local sales representative for details.
Midea Biomedical reserves right to interpret the data.

Dimensions and Construction

Interior (w*d*h)	Up:680*620*650 mm Down: 680*620*650 mm
Exterior (w*d*h)	866*811*1920 mm
Access Port	1 Access Port- for external monitoring probe(s) (25 mm diameter)
Drawers	Up: 6 Down: 6
Wheels	4 Swivel Casters + 2 Leveling Feet
Net Weight	142 kg
Gross Weight	165 kg

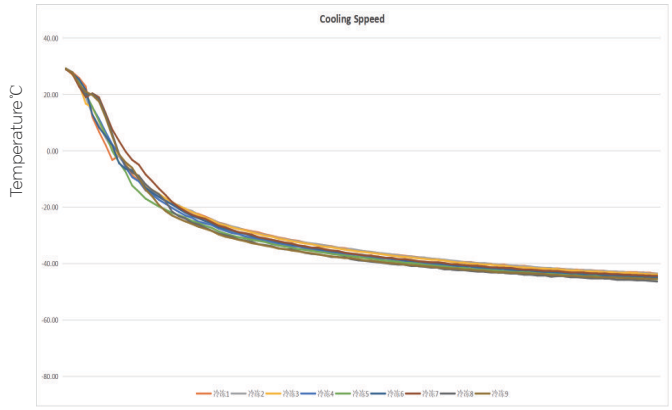
All performance data from 518L biomedical freezer, 25 ambient, -40°C

Uniformity



Elapsed Time (min)

Cooling Speed



Elapsed Time (min)

