TEMP CONTROL SPECIALIST

BIOMEDICAL COMBINED REFRIGERATOR & FREEZER

2~8℃
-40℃

2~8℃
-25℃
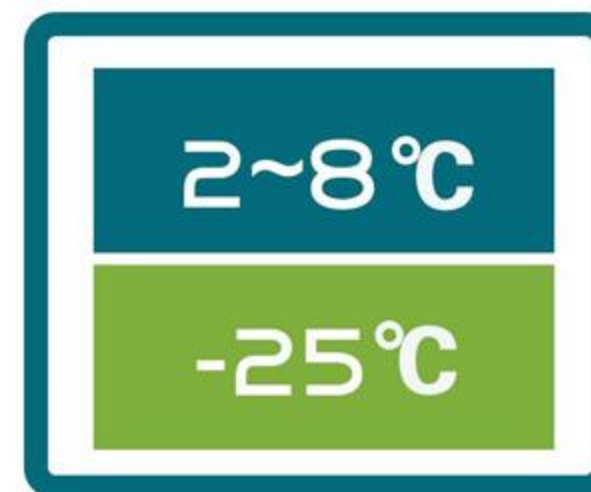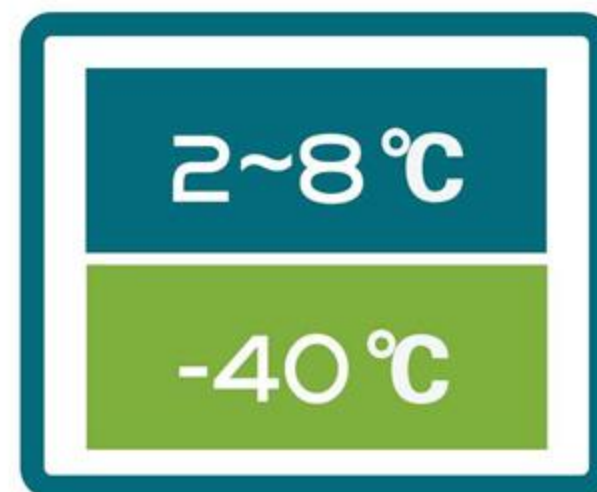
Safe **Stable** **Eco** **CFC-free** **Alarms**

COMBINED REFRIGERATOR & FREEZER

Pre-Freezing

Life science

Chemical Storage

Culture

Bio-sample

Reagents

Frozen Plasma

Enzymes

Pre-Freezing

Clinical

Pharmaceutical

Vaccines

TEMPERATURE CONTROL TECHNOLOGY

» Dual cooling system

This unit is equipped with two independent cooling systems, one for the upper compartment and one for the lower compartment. Each system has its own independent control system, allowing for individual temperature settings.

» Ultimate uniformity

The chambers maintain temperatures within +/-3°C throughout the entire compartment, ensuring confidence that items are stored at the correct temperature regardless of their placement in the chamber.

## » Excellent insulation performance

All units are filled with thick, high-density PU foam, providing excellent insulation.

» Fast recovery

Faster temperature recovery even after prolonged door openings. The high efficient cooling system maintains consistent temperatures, ensuring that preservations are stored at the right temperature even when the unit is opened frequently.

» Optimized fluctuation

Maintain superior temperature stability, avoiding rapid and significant changes in temperature. This ensures that samples, medications, vaccines, and blood therapies are consistently stored in their optimal environment, without compromise.
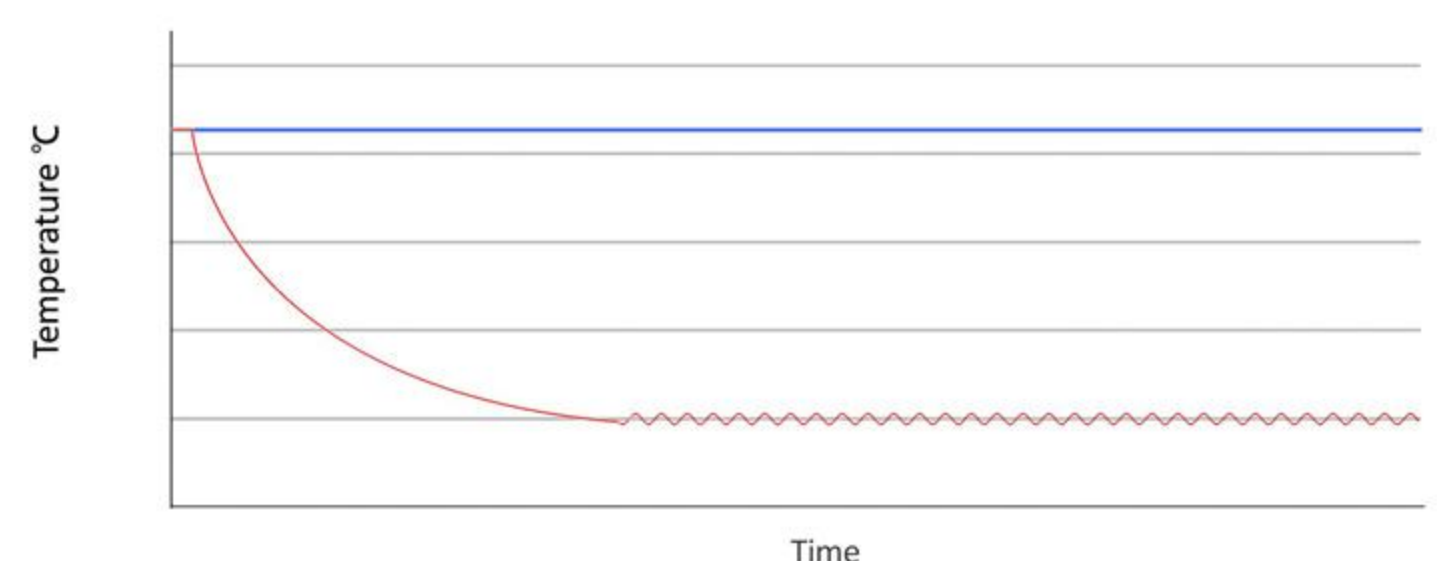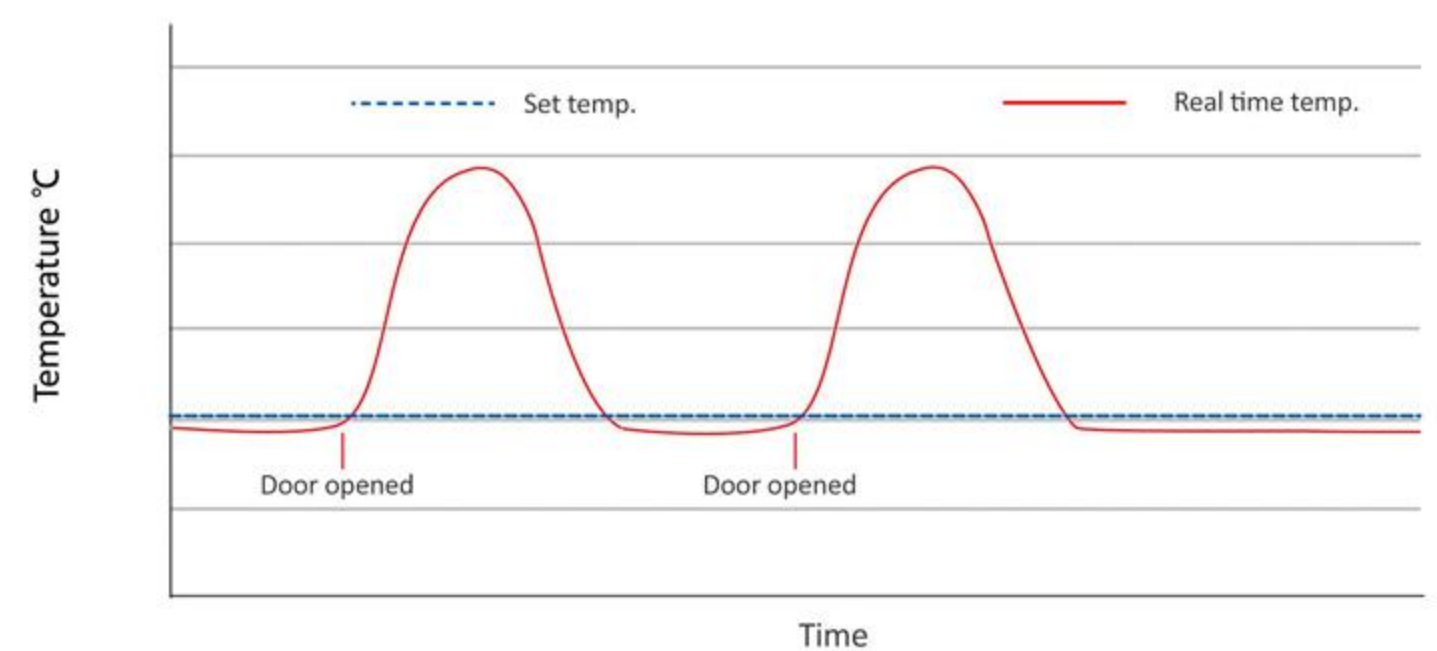
2~ 8℃

-10 ~ -40℃

A   B
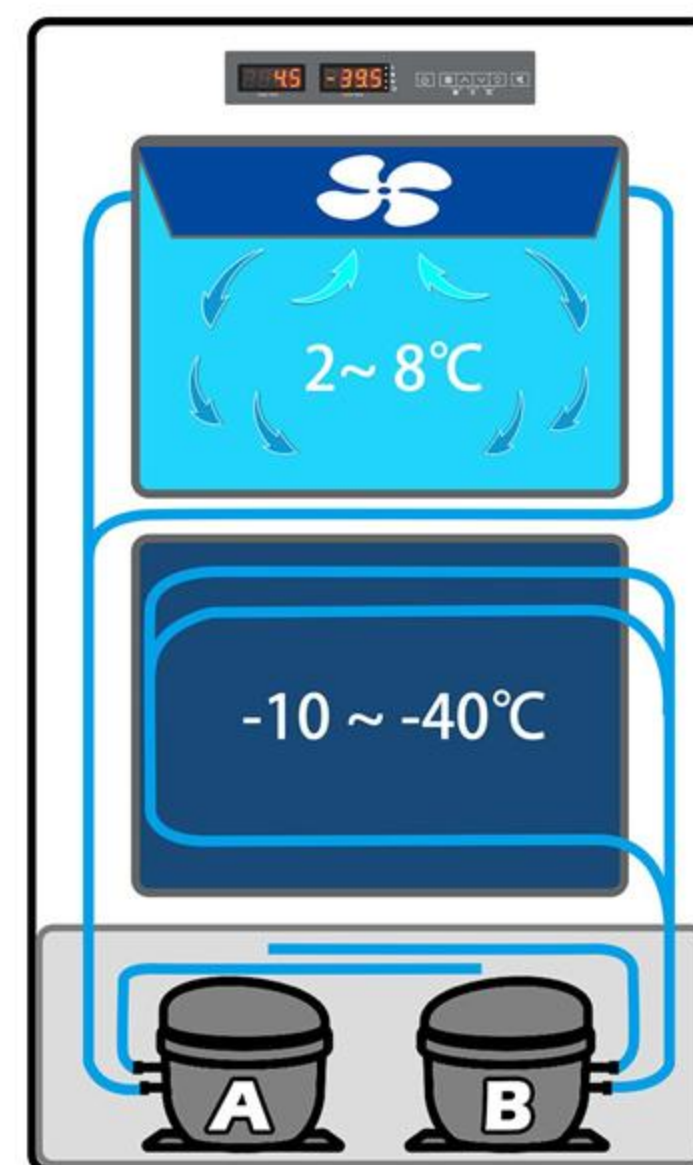
Refrigerator Compartment
› Forced air cooling system
› Fan-assisted circulation
› Uniform air distribution

Freezer Compartment
› Static cooling system
› Copper tube evaporator
› Pressure equalization

Temperature ℃

Set temp.   Real time temp.

Door opened   Door opened

Time

Temperature ℃

Time

COMBINED REFRIGERATOR & FREEZER

Safe storage
to safeguard patient samples and ensure medications remain effcacious.

Presice temp control
to ensure stable and accurate temperatures in the chamber

User-friendly
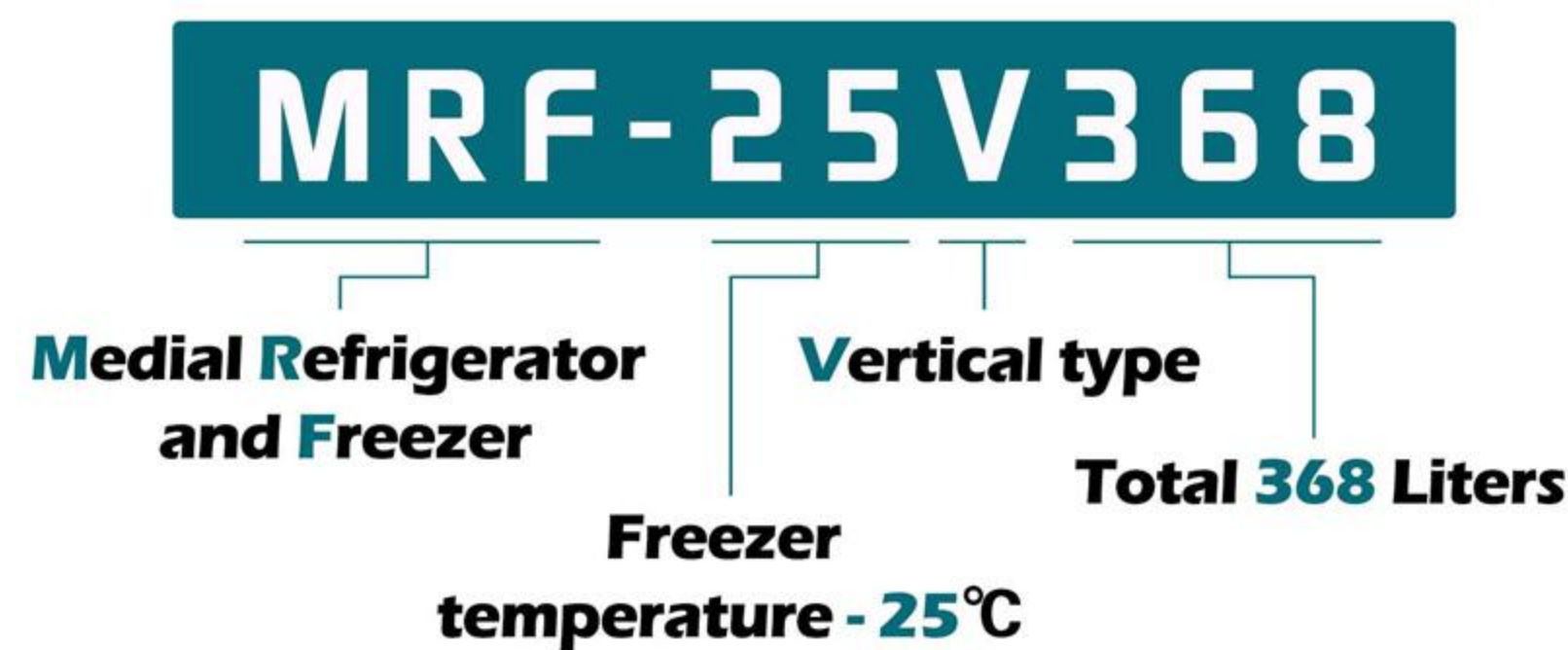to bring convenience and easy maintenance to users

Eco-friendly
to reduce operating costs, privide a quiet working environment and support sustainability initiatives

GUIDE TO MODELS

Find out the model you need quickly

MRF-25V368

Medial Refrigerator and Freezer

Freezer temperature - 25℃

Vertical type

Total 368 Liters

ECO-FRIENDLY & USER-FRIENDLY

Natural Refrigerants

Sustainable U.S. EPA, SNAP, and EU F-Gas compliant natural refrigerants and foaming agents support sustainability initiatives. The cooling system uses **R290 or R600a** which are are environmentally friendly, having no impact on ozone depletion and a very low Global Warming Potential (GWP) grade.

High-efficiency cooling system

Operating at a low noise level while still providing efficient cooling, our advanced cooling technology offers lower energy consumption and better user experiences.

Locks with keys

Cold air distribution system
for the refrigerator

Glycerine box with sensor inside

Removable drawers

Built-in locks
Ensures the security of your preservations

LED lighting
Smart lighting on and off for convenient access

Fan-assisted evaporator
Highly efficient evaporator with high airflow fans

Glycerine box
Precise temperature control and minimal fluctuations

Adjustable shelves
Easy to remove and install
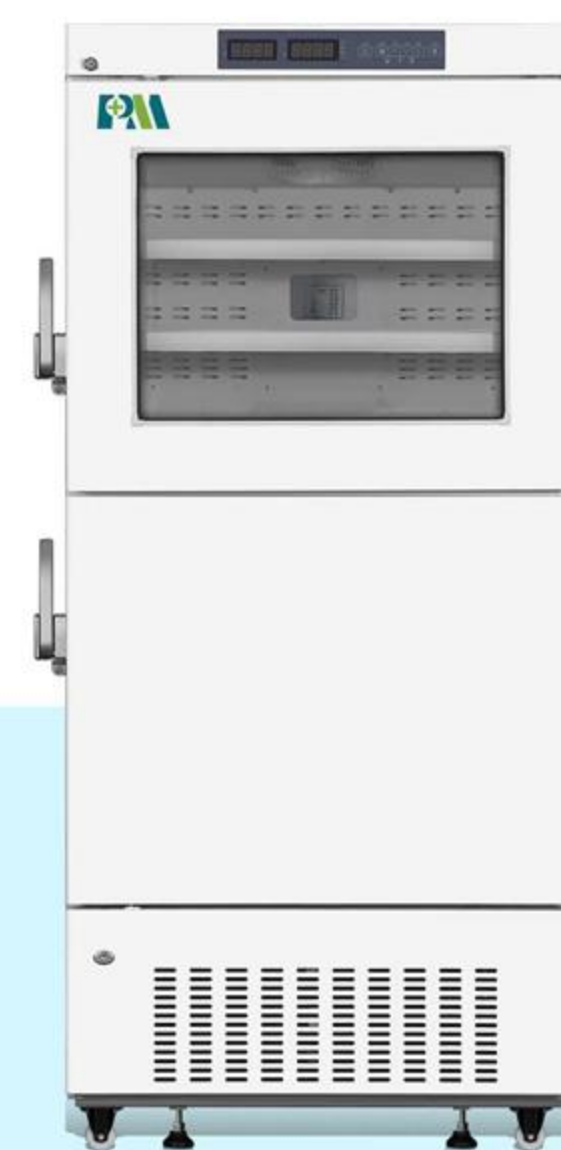
Removable drawers
For organizing your storage

Padlock hole
For fixing additional padlocks

Universal casters
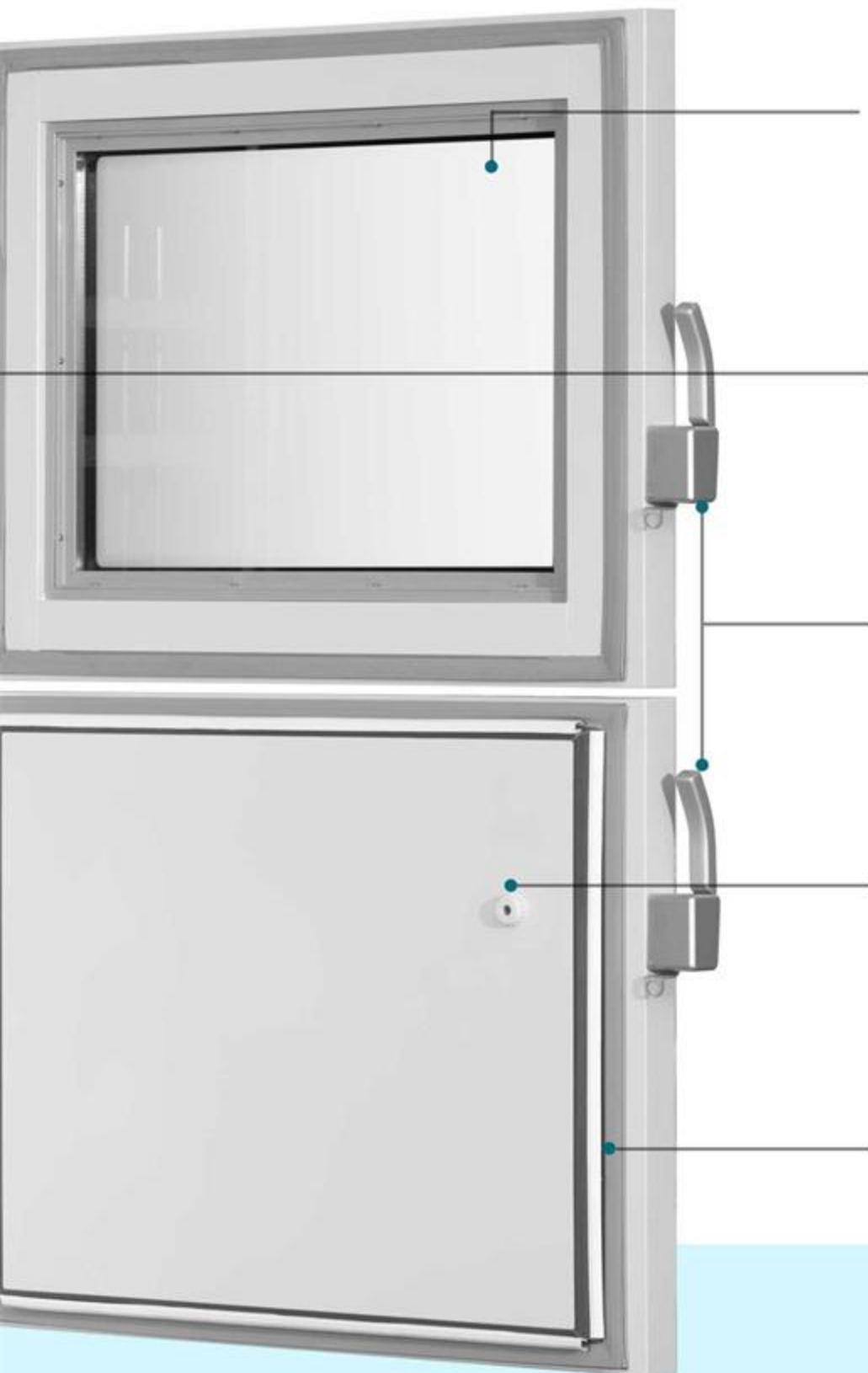Brake & leveling feet for easy
movement and stable fixation

MRF-40V528

MRF-25V528

Z06-sx Controller

Optional Z06 controller with internal USB data logger

Heated glass

Prevent fogging and condensation

Access ports

Each compartment with 1 dia.25mm ports for additional monitoring device

Ergonomic handles

Easy open for one-hand operation
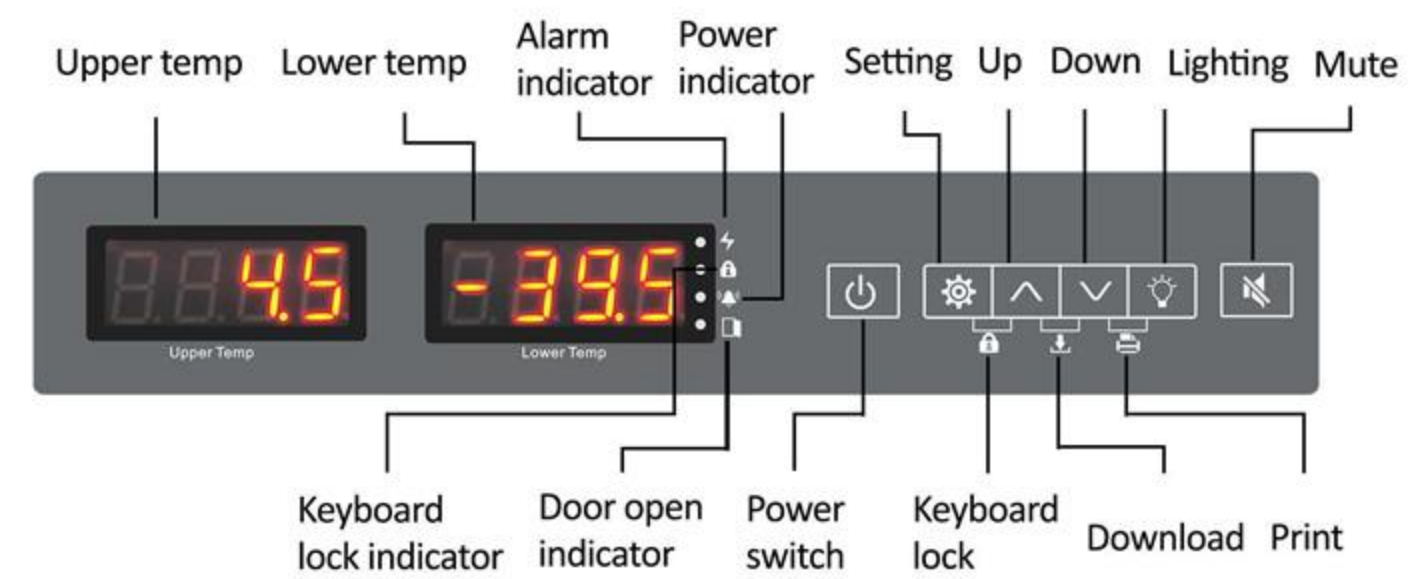
Equalization Port

Allow a quick re-access to your preservations

Sealing gaskets

Long-lasting magnetic sealing gasket locks in cold air

USB interface

Temperature recording and alarm data can be exported to PDF or Excel file

Upper temp Lower temp Alarm indicator Power indicator Setting Up Down Lighting Mute

Keyboard lock indicator Door open indicator Power switch Keyboard lock Download Print

Z06-sx Controller

The temperature controller can accurately control the temperature of the two compartments and provide audiable and visual alarms.

› Pre-set : Refrigerator @ 5℃, Freezer @-25℃/-40℃.
› The precision of display and control is 0.1℃.
› Audible and visual alarms : High/low temp, power failure, sensor error, door ajar, ambient temp, backup battery failure, and condenser fault.

Easy open handles

USB interface

FEATURES

» Forced air circulation

The forced-air circulation system of the refrigerator maintains uniform chamber temperatures and provide fast temperature recovery after door openings. The refrigerator compartment does not require a defrost cycle to maintain a constant temperature, ensuring that items are always stored at the desired temperature without interruption.

» Copper tube evaperator

The high-quality copper tube evaporator wrapped around the freezer cabinet improves the refrigeration efficiency of the cabinet and ensures more uniform temperature inside.

» Multiple applications

This type of refrigerator has a wide range of applications and provides practical value in clinics, blood stations, biological laboratories, hospital testing departments. It is suitable for applications with limited space but a wide variety of storage.

» Variable large space

Refrigerator (273 liters) is equipped with 3 coated wire shelves and freezer (255 liters) with 2 coated wire shelves and 9 removable drawers.

MRF-40V368 MRF-25V368

FEATURES

» ## Dual cooling system

The specially designed dual-system biomedical freezer contains two independent refrigeration systems (two compressors, two condensers, two control systems).

» ## Z06-sx Controller

The temperature controller can accurately control the temperature of the two compartments and provide audiable and visual alarms.

» ## Variable space

Refrigerator (183 liters) is equipped with 3 coated wire shelves (adjustable) and freezer (185 liters) with 2 coated wire shelves and 9 removable drawers.

» ## Internal USB data logger

For monitoring, recording and exporting temperature & alarm data through a built-in USB interface.

» ## Foamed glass door

The refrigerator compartment is equipped with a foamed glass door, which is electrically heated and has anti-fog and anti-condensation features.

» ## High-quality materials

The unit are made of high-quality coated cold-rolled steel both exterior and interior, which is antibacterial, anti-corrosive, and easy to clean.

Easy open handles

Removable drawers

MRF-25V300

FEATURES

» ## Precise Controller

The temperature controller can accurately control the temperature of the two compartments and provide audiable and visual alarms.

» ## Forced air circulation

The forced-air circulation system of the refrigerator maintains uniform chamber temperatures and provide fast temperature recovery after door openings. The refrigerator compartment does not require a defrost cycle to maintain a constant temperature, ensuring that items are always stored at the desired temperature without interruption.

» ## Variable space

Refrigerator (198 liters) is equipped with 2 coated wire shelves (adjustable) and freezer (102 liters) with 3 drawers.

» ## Lockable cabinets

The unit standard equipped with a built-in lock, provides a secure storage space for your preservations.

» ## High-quality materials

The extrior is made of high-quality coated cold-rolled steel and interior made of HIPS.

› Pre-set : Refrigerator @ 5℃, Freezer @-25°.
› The precision of display and control is 0.1℃.
› Audible and visual alarms : High/low temp, power failure, sensor error, door ajar, and controller failure.

Smart lighting on and off for convenient access

3-Drawer design in the freezer

SPECIFICATION SHEET
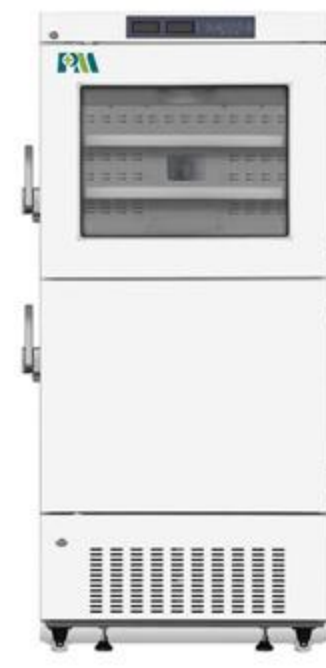
Model	MRF-40V528	MRF-40V368	MRF-25V528	MRF-25V368	MDF-25V300
Specifications					
Shelf/drawer QTY	Shelves/5 drawers/9	Shelves/5 drawers/6	Shelves/5 drawers/9	Shelves/5 drawers/6	Shelves/2 drawers/3
Cooling system	Forced air	Forced air	Forced air	Forced air	Forced air
	Copper tube	Copper tube	Copper tube	Copper tube	Copper tube
Defrost	Ref: Auto	Ref: Auto	Ref: Auto	Ref: Auto	Ref: Auto
	Fr: Manual	Fr: Manual	Fr: Manual	Fr: Manual	Fr: Manual
Refrigerant	Ref: R600a	Ref: R600a	Ref: R600a	Ref: R600a	Ref: R290
	Fr: R290	Fr: R290	Fr: R290	Fr: R290	Fr: R290
Noise(db)	52	50	52	50	49
Ambient temperature (℃)	10~32℃	10~32℃	10~32℃	10~32℃	10~32℃
Temperature range (℃)	Ref: 2 ~ 8℃	Ref: 2 ~ 8℃	Ref: 2 ~ 8℃	Ref: 2 ~ 8℃	Ref: 2 ~ 8℃
	Fr: -20 ~ -40℃	Fr: -20 ~ -40℃	Fr: -10 ~ -25℃	Fr: -10 ~ -25℃	Fr: -10 ~ -25℃
Cooling system					
Compressor QTY	2	2	2	2	2
Sensor	NTC	NTC	NTC	NTC	NTC
Temperature controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
Display	LED digital display	LED digital display	LED digital display	LED digital display	LED digital display
Power					
Voltage(V)	187~242	187~242	187~242	187~242	187~242
Frequency(Hz)	50Hz	50Hz	50Hz	50Hz	50Hz
Power Consumption(kWh/24h)	7.0	6.8	5.5	3.0	2.9
Power (W)	527W	430W	431W	300W	349W
Materials					
Internal material	Coated steel	Coated steel	Coated steel	Coated steel	HIPS
External material	Coated steel	Coated steel	Coated steel	Coated steel	Coated steel
Insulation	CFC-free PURF	CFC-free PURF	CFC-free PURF	CFC-free PURF	CFC-free PURF
Capacity (L/cu.ft)	528/18.64	368/12.99	528/18.64	368/12.99	300/10.59
	Ref: 273/9.64	Ref: 183/6 .46	Ref: 273/9.64	Ref: 183/6 .46	Ref: 198/6.99
	Fr: 255/9.0	Fr: 185/6.53	Fr: 255/9.0	Fr: 185/6.53	Fr: 102/3.60
Measurement					
NT./GT.(kg)	174/194	135/175	160/180	138/178	100/120
Exterior size(W*D*H)(mm)	900*818*1870	720*830*1870	900*818*1875	720*830*1870	673*676*1886
Interior size(W*D*H)(mm)	765*640*635	580*626*625	765*640*635	580*626*625	565*480*759
	651*636*635	466*636*625	651*636*635	466*636*625	461*465*600
Package size(W*D*H)(mm)	921*960*1950	775*920*1990	921×960×1950	780*920*1990	720*695*2015
Shipping CBM	1.8	1.4	1.8	1.4	1.0
20GP/40GP/40HQ	12/24/24	18/39/39	12/24/24	18/39/39	21/48/48
Alarms					
High/low temperature	Y	Y	Y	Y	Y
Power failure	Y	Y	Y	Y	Y
Controller failure	Y	Y	Y	Y	Y
Filter check	N/A	N/A	N/A	N/A	N/A
Sensor error	Y	Y	Y	Y	Y
Low battery	N/A	N/A	N/A	N/A	N/A
Condenser fault	Y	Y	Y	Y	N/A
Ambient temperature	Y	Y	Y	Y	N/A
Door ajar	Y	Y	Y	Y	Y
Power failure backup	8 hours	8 hours	8 hours	8 hours	8 hours
Accessories					
Castor	Y	Y	Y	Y	Y
leveling feet	Y	Y	Y	Y	N/A
Access port Qty/diameter	2/25mm	2/25mm	2/25mm	2/25mm	1/25mm
USB Interface	Y	Y	Y	Y	N/A
Remote alarm port	Optional	Optional	Optional	Optional	Optional
Door type	Ref: Foamed glass	Ref: Foamed glass	Ref: Foamed glass	Ref: Foamed glass	Ref: Solid
	Fr: Solid	Fr: Solid	Fr: Solid	Fr: Solid	Fr: Solid
Chart recorder	N/A	N/A	N/A	N/A	N/A
Data logger	Optional	Optional	Optional	Optional	Optional
AISI 304 interior	Optional	Optional	Optional	Optional	N/A

SPECIFICATION SHEET
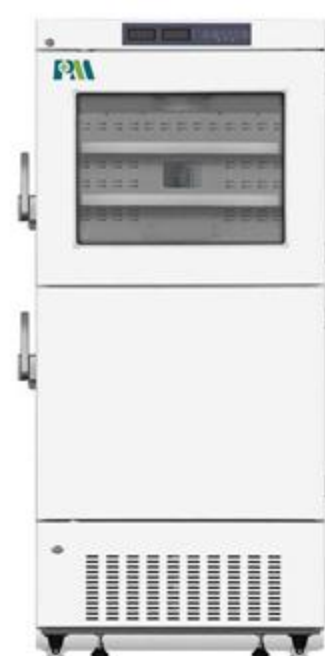
Model	MRF-40V528	MRF-40V368	MRF-25V528	MRF-25V368	MRF-25V300
Specifications Shelf/drawer QTY	Shelves/5 drawers/9	Shelves/5 drawers/6	Shelves/5 drawers/9	Shelves/5 drawers/6	Shelves/2 drawers/3
Cooling system	Forced air	Forced air	Forced air	Forced air	Forced air
	Copper tube	Copper tube	Copper tube	Copper tube	Copper tube
Defrost	Ref: Auto	Ref: Auto	Ref: Auto	Ref: Auto	Ref: Auto
	Fr: Manual	Fr: Manual	Fr: Manual	Fr: Manual	Fr: Manual
Refrigerant	Ref: R600a	Ref: R600a	Ref: R600a	Ref: R600a	Ref: R290
	Fr: R290	Fr: R290	Fr: R290	Fr: R290	Fr: R290
Noise(db)	52	50	52	50	49
Ambient temperature (℃)	10~32℃	10~32℃	10~32℃	10~32℃	10~32℃
Temperature range (℃)	Ref: 2 ~ 8℃	Ref: 2 ~ 8℃	Ref: 2 ~ 8℃	Ref: 2 ~ 8℃	Ref: 2 ~ 8℃
	Fr: -20 ~ -40℃	Fr: -20 ~ -40℃	Fr: -10 ~ -25℃	Fr: -10 ~ -25℃	Fr: -10 ~ -25℃
Cooling system Compressor QTY	2	2	2	2	2
Sensor	NTC	NTC	NTC	NTC	NTC
Temperature controller	Microprocessor	Microprocessor	Microprocessor	Microprocessor	Microprocessor
Display	LED digital display	LED digital display	LED digital display	LED digital display	LED digital display
Power Voltage(V)	187~242	187~242	187~242	187~242	187~242
Frequency(Hz)	50Hz	50Hz	50Hz	50Hz	50Hz
Power Consumption(kWh/24h)	7.0	6.8	5.5	3.0	2.9
Power (W)	527W	430W	431W	300W	349W
Materials Internal material	Coated steel	Coated steel	Coated steel	Coated steel	HIPS
External material	Coated steel	Coated steel	Coated steel	Coated steel	Coated steel
Insulation	CFC-free PURF	CFC-free PURF	CFC-free PURF	CFC-free PURF	CFC-free PURF
Measurement Capacity (L/cu.ft)	528/18.64	368/12.99	528/18.64	368/12.99	300/10.59
	Ref: 273/9.64	Ref: 183/6 .46	Ref: 273/9.64	Ref: 183/6 .46	Ref: 198/6.99
	Fr: 255/9.0	Fr: 185/6.53	Fr: 255/9.0	Fr: 185/6.53	Fr: 102/3.60
NT./GT.(kg)	174/194	135/175	160/180	138/178	100/120
Exterior size(W*D*H)(mm)	900*818*1870	720*830*1870	900*818*1875	720*830*1870	673*676*1886
Interior size(W*D*H)(mm)	765*640*635	580*626*625	765*640*635	580*626*625	565*480*759
	651*636*635	466*636*625	651*636*635	466*636*625	461*465*600
Package size(W*D*H)(mm)	921*960*1950	775*920*1990	921×960×1950	780*920*1990	720*695*2015
Shipping CBM	1.8	1.4	1.8	1.4	1.0
20GP/40GP/40HQ	12/24/24	18/39/39	12/24/24	18/39/39	21/48/48
Alarms High/low temperature	Y	Y	Y	Y	Y
Power failure	Y	Y	Y	Y	Y
Controller failure	Y	Y	Y	Y	Y
Filter check	N/A	N/A	N/A	N/A	N/A
Sensor error	Y	Y	Y	Y	Y
Low battery	N/A	N/A	N/A	N/A	N/A
Condenser fault	Y	Y	Y	Y	N/A
Ambient temperature	Y	Y	Y	Y	N/A
Door ajar	Y	Y	Y	Y	Y
Power failure backup	8 hours	8 hours	8 hours	8 hours	8 hours
Accessories Castor	Y	Y	Y	Y	Y
leveling feet	Y	Y	Y	Y	N/A
Access port Qty/diameter	2/25mm	2/25mm	2/25mm	2/25mm	1/25mm
USB Interface	Y	Y	Y	Y	N/A
Remote alarm port	Optional	Optional	Optional	Optional	Optional
Door type	Ref: Foamed glass	Ref: Foamed glass	Ref: Foamed glass	Ref: Foamed glass	Ref: Solid
	Fr: Solid	Fr: Solid	Fr: Solid	Fr: Solid	Fr: Solid
Chart recorder	N/A	N/A	N/A	N/A	N/A
Data logger	Optional	Optional	Optional	Optional	Optional
AISI 304 interior	Optional	Optional	Optional	Optional	N/A

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