Model: MC-5L216
MC-5L1036B
MC-5L1366B

Pharmacy Refrigerator

User Manual

Please read the User Manual carefully before use and keep it properly for further reference.

for after sales use

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Warning: Flammable refrigerant is adopted for the product

WARNING: Ensure all ventilation openings are not obstructed.
WARNING: Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
WARNING: Do not damage the refrigerant circuit.

WARNING: The packaging base at the bottom of this series of products must be removed before use.
WARNING: When moving this series of products, take care that the bottom foot does not touch the power cord.
WARNING: The bottom front wheel brake of this series of products need to be locked after moving to the designated position.
WARNING: This series of products need to be left to stand for 12 hours before initial power-up.
WARNING: When this series of products are just connected to the power supply, do not immediately put the items in to it. After running for a period of time, when the temperature inside the product drops to the set temperature, then put the items in batches.

Refrigerant and cyclopentane foaming material used for the appliance are flammable. Therefore, when the appliance is scrapped, it shall be kept away from any fire source and be recovered by a special recovering company with corresponding a qualification other than being disposed of by combustion, so as to prevent damage to the environment or any other harm.

The safety of any system incorporating the equipment is the responsibility of the assembler of the system.

IMPORTANT:
Flammable gas and refrigerant used. It is the consumer's responsibility to comply with Federal and Local regulations when disposing of this product.
Suggestion: Cut off the pipe line and drain the refrigerant without any open fire around.

WARNING: If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

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	**Warning**; flammable material
	The product with the symbol reads "warning terms"
CYCLOPENTANE	The product with this symbol reads "cyclopentane blowing"

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PRODUCT OVERVIEW

Structure

Primarily consists of refrigeration system, electrical control and alarm system, cabinet, and door body.

Applicable scope

Suitable for storing medicines, vaccines, biological products, and reagents at 2°C~8°C.

Refrigeration system

Mainly composed of compressor, condenser, dryer filter, capillary tube, and evaporator assembly.

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SAFETY PRECAUTIONS

Dear Customer:

Greetings! Thank you for using this pharmacy refrigerator. To ensure proper reading of this Manual and safe operation of the product, preventing personal injuries or item damage accidents, please peruse the following instructions.

Safety Precautions

⚠ WARNING

Use a power socket with a grounding wire to prevent an electric shock. If the power socket is not grounded, a professional technician must install a grounding wire.

- Make sure to place the refrigerator stably on a level indoor floor to prevent tipping. Floor instability or improper placement may cause the refrigerator to overturn, leading to personal injury.
- To extend the power cord, make sure that the cross-sectional area of the extension cord is not less than 2mm² and the length does not exceed 3m. Failure to comply may result in fire or electric shock.
- In case of flammable gas leakage, close the gas valve, open windows and doors for ventilation, and avoid turning on any electrical switches. Do not connect or disconnect the refrigerator's power plug, as this may cause an explosion or fire.
- Only professional technicians or after-sales service personnel may repair this refrigerator. Failure to comply may result in electric shock or fire.
- Use only the dedicated power source specified on the refrigerator's nameplate; otherwise, fire or electric shock may occur.
- If the power voltage frequently falls below 198V or exceeds 264V, install an automatic voltage stabilizer rated above 2000W suitable for motor loads.
- Since the refrigerator has a power cord with a three-wire (grounded) plug, we kindly request users to use a standard three-wire (grounded) socket rated for 10A.
- Under no circumstances should the grounding pin of the power cord be cut off or removed. Ensure that the power plug and socket are securely and reliably connected; otherwise, fire may occur.
- When unplugging the plug from the power socket, hold the plug tightly instead of pulling the wire of the plug. If the wire is pulled, an electric shock or a fire due to a short circuit may occur.

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Warning

Please abandon the refrigerator according to local regulation for it use flammable blowing gas and refrigerant.

- If the refrigerator is not operating properly, unplug the power plug. Continued operation under abnormal conditions may cause an electric shock or fire.
- Before any repair or maintenance of the refrigerator, always disconnect it from the power supply to prevent electric shocks or personal injuries.
- Make sure that the drugs or suspended particles inside and around the refrigerator will not be inhaled during repairs or maintenance; otherwise, they may cause harm to human health or the environment.
- When storing toxic, harmful, or radioactive substances, please use the refrigerator in a safe area. Improper use may cause harm to human health or the environment.
- Unplug the power plug when the refrigerator is going to be out of service for a long time, so as to prevent electric shocks, electric leakage, or fire due to aging of the power cord.
- If the refrigerator is going to be left unused in an unattended area for a long time, ensure that children do not have access to the refrigerator. The refrigerator shall be disposed of by the appropriate personnel. The doors shall be removed to prevent accidents such as suffocation.
- Neither store flammable, explosive, or volatile substances in the refrigerator nor use flammable sprays near the refrigerator; otherwise, an explosion or fire may occur.
- Never store corrosive substances such as acids or alkalis in the refrigerator. Otherwise, these substances may cause damage to internal components or electrical parts of the refrigerator.
- Do not leave the plastic packing bags in a place accessible to children, as this may result in suffocation accidents.
- Do not climb on the refrigerator or put any objects on top; otherwise, the refrigerator may tip over, thus causing personal injuries or damage to the refrigerator.
- Do not use the refrigerator outdoors. Exposure to rain may cause an electric
- leakage or electric shock.
  Do not place the refrigerator in a humid location or a place where the refrigerator is likely to be hit by splashing water. Otherwise, an electric leakage or electric shock
- may occur due to reduced insulation.
  Do not pour water onto the refrigerator, as it may cause an electric shock or short
- circuit.
  Never disassemble, repair, or modify the refrigerator yourself. Otherwise, fire or personal injuries may occur due to improper operation.

for after sales use

- Do not connect the grounding wire to a gas pipe, power supply pipe, telephone line, or lightning rod when grounding the refrigerator. The above grounding may cause an electric shock or other hazards.
- Do not touch any electrical parts, such as the power plug, or operate any switch with a wet hand; otherwise, an electric shock may occur.
- Do not put water containers or heavy objects on the refrigerator. Falling objects may cause personal injuries, and spilled water may cause reduced insulation, resulting in an electric leakage or electric shock.
- Do not insert metal objects such as iron nails or metallic wires into any holes, gaps, or ventilation ports for internal air circulation of the refrigerator, as contact between these objects and moving parts may cause electric shock or injury.
- Place the plastic packing bag in a place not accessible to children to avoid suffocation accidents.

⚠ CAUTION

- Keep the refrigerator clear of obstructions around it to ensure good ventilation.
- When it is necessary to restart the refrigerator after power outage or the refrigerator is turned off, check the settings of the refrigerator. Changes in settings may deteriorate the items being kept.
- Once the power is cut off, the refrigerator can only be powered on again after more than five minutes to avoid damage to the compressor or the system.
- Gloves shall be worn during maintenance to avoid directly touching sharp edges or corners and causing injuries to personnel.
- Hold the handle to close the doors for fear of finger pinching.
- Tilt the refrigerator for 45° or less when handling or moving it.
- Be careful not to be tripped over by the refrigerator when handling it to prevent damage to the refrigerator or personal injuries.
- Do not use the door handle to lift or carry the refrigerator to avoid damage to it or personal injuries.
- Do not damage the refrigeration circuit.
- Do not use electrical appliances inside the storage compartment of the refrigerator, unless they are of the type recommended by the manufacturer.

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PRECAUTIONS FOR USE

- Before putting items into the equipment, confirm that the temperature in the storage compartment has reached the setpoint, and then put the items in batches. Each time you put items in, make sure that the items account for 1/3 or less of the compartment volume, for fear of excessive temperature rise.

- The displayed temperature of the equipment is the temperature at the temperature sensor in the cabinet. When the equipment just starts to run, the displayed temperature is somewhat different from the actual temperature at the center of the equipment. However, after the equipment enters a stable status, the displayed temperature will gradually approach the actual value.

- The refrigerator employs intelligent temperature control compensation technology. It automatically adjusts compartment temperature based on ambient temperature changes to maintain precise alignment with the setpoint, ensuring optimal storage conditions for items.

- The equipment cabinet is designed with a testing hole so that the testing line of the cabinet can be led out for testing. After leading out the testing line, be sure to re-plug the testing hole with thermal insulation material. Otherwise, the temperature inside the cabinet may not reach the setpoint, causing condensation around the outside of the through-hole.

- Please use diluted neutral cleaner to clean the equipment. Do not use brushes, acid, gasoline, soap powder, polish or hot water to clean the equipment; otherwise, the painted surface and plastic/rubber parts may be damaged. Special care must be taken not to use volatile solvents such as gasoline to wipe plastic/rubber parts.

- Disconnect power and turn off the power switch when the equipment is unused for extended periods.

- Try to minimize the opening time of the door each time you take out or put in items to avoid a large impact on the compartment temperature.

- After the door is opened, the compartment temperature will rise sharply in a short time, which is normal, and it will return to the setpoint for normal operation after the door is closed.

- In high-temperature and high-humidity environments, glass doors may develop condensation. This is normal and does not affect compartment storage temperatures. Improve ventilation and reduce ambient humidity if condensation occurs.

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HANDLING

1. Protect the product in moving it, If the refrigerator has a bubble bottom pad, please move it by handcart with cushion; If the refrigerator has a bubble bottom pad, please move it by forklift.

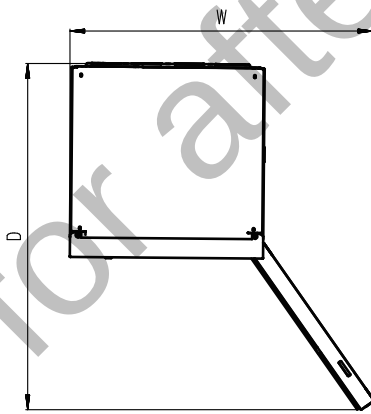
2. Remove all packing materials and bottom cushion, then move into house for placement.

3. After moving it to appropriate location, wait for 24 hours before power on.

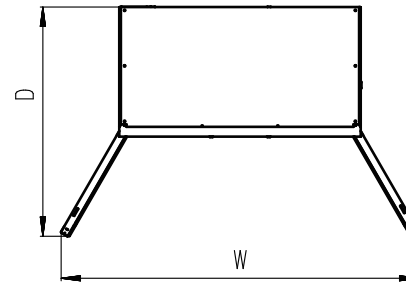
DOOR SPACE REQUIREMENTS

The unit's door must be able to open fully as shown.

W×D⩾1020mm*950mm（MC-5L216）
W×D⩾2030mm*1150mm（MC-5L1036B）
W×D⩾2495mm*1300mm（MC-5L1366B）



Schematic Diagram of MC-5L216



Schematic Diagram of
MC-5L1036B and MC-5L1366B

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PRODUCT INSTALLATION

Installation Environment

- The refrigerator must be used indoors with Pollution Level 2 and Overvoltage Category II.
- Ambient temperature: 16°C~32°C. The optimal temperature range is 18°C~25°C. Use an air conditioning system if necessary.
- Ambient humidity: below 80%Rh.
- Avoid environments with dense dust.
- Avoid mechanical swinging or vibration.
- Altitude of working position of refrigerator: below 2000 m.
- IPX rating: IPX0
- Input voltage: within 220-240V±10%/50/60Hz
- The refrigerator is sensitive to ambient temperature. If installed in an environment other than the above, the refrigerator may not operate properly. Please use it after improving the environment.
- Do not install the refrigerator outdoors. Exposure to rain may cause an electric leakage or electric shock.

Installation Site

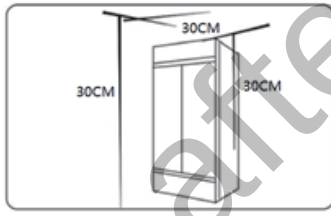
- The refrigerator shall not be installed in a narrow and confined space. The space for installation shall allow the normal entry and exit of the equipment, without incurring maintenance difficulties in case of equipment failure, leading to delayed maintenance and damage to the stored items.
- The ground for installation must be solid and flat, non-combustible and able to withstand the weight of the equipment during operation.
- Good ventilation, no exposure to direct sunlight.
- Each equipment shall be provided with an independent power socket. Please ensure that the power socket carries a current of ⩾ 10A and that the plug is firmly connected to the socket.
- Check the working voltage before use. For areas with unstable voltage, use a voltage stabilizer suitable for the equipment's load with a power rating above 2000W to ensure compliance with input voltage requirements in the installation environment.

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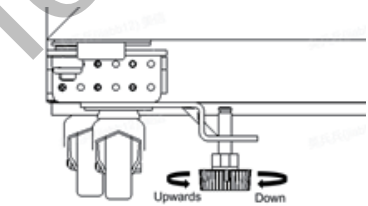
- The equipment shall be grounded securely. If the power cord socket is equipped with a grounding wire, check that the grounding is good before use. If the socket is not equipped with a grounding wire, be sure to have a professional engineer install the grounding wire.
- Do not connect the grounding wire to a gas pipe, water pipe, telephone line, or lightning rod when grounding the refrigerator; otherwise, an electric shock may occur.
- The power plug must be accessible after installation to facilitate timely unplugging of the power cord in case of an emergency. Do not block the vent of the refrigerator.

Preparations before Use

1. Remove the whole external packing of the product (including protective foam in the packing box).
2. Check the accompanying accessories. Please check the items inside with reference to the packing list. If there is any discrepancy, please contact the after-sales service center in time.
3. Placement conditions: Ensure at least 30cm clearance around all sides of the refrigerator for proper ventilation and heat dissipation.

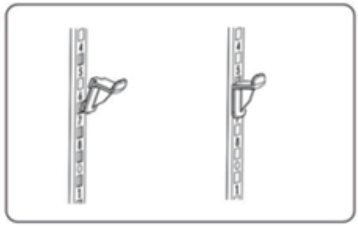


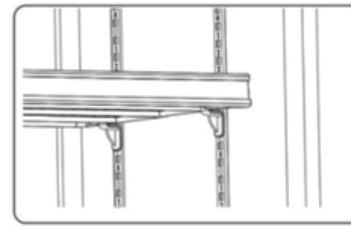
4. Rotate the horizontal supporting feet clockwise with a wrench or manually to extend downward so that they are supported on the ground to ensure that the refrigerator does not move when in use.



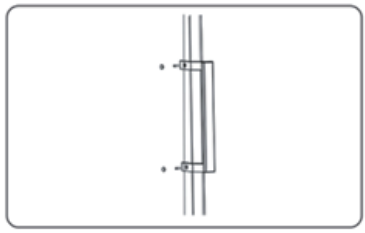
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5. Adjust the spacing between steel wire shelves based on actual needs and install the wire shelves.

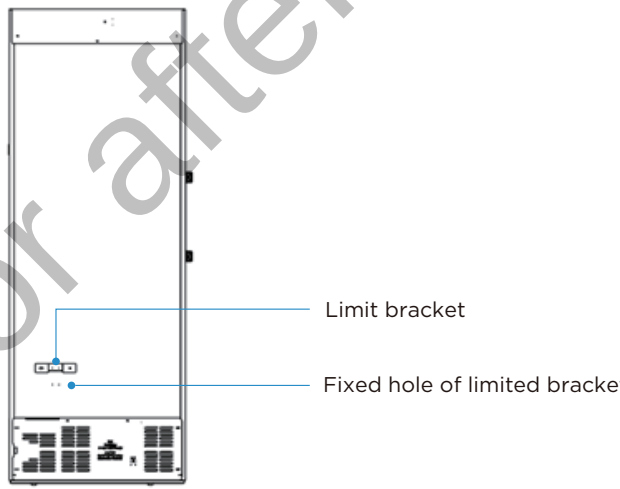




6. For products with door handles contained in the list of accessories, please install the door handle (for models with a handle).

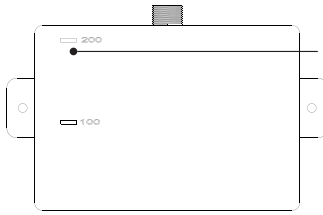


7. Take the rear stopper block out of the box and secure it to the rear panel using screws (for models with a rear stopper block).

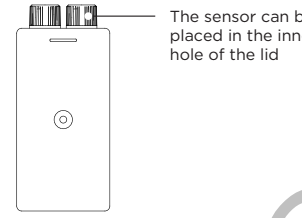


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8. Test box: used to simulate temperature for medications/reagents.

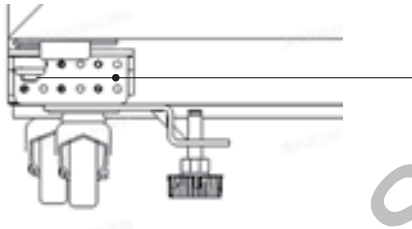


(Applicable to MC-5L216 and MC-5L1036)



(Applicable to MC-5L1366B)

9. For dual-door products with uneven edges on top of both doors, adjust the bolts on the bottom hinge using a wrench to align the doors.

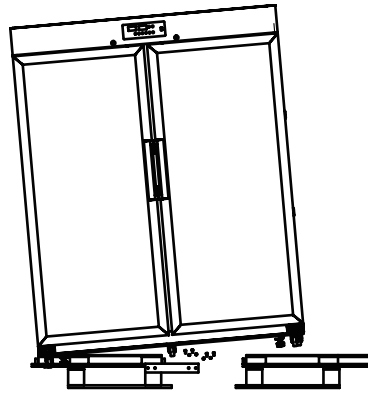


10. Instructions for automatic door closer (hold-open, self-closing)

Model	Hold-open angle	Self-closing type
MC-5L216	• Self-locking below 15°, hold-open above 15°	Limit + self-locking
MC-5L1036B	• Self-closing below 45°, hold-open above 45°	Hold-open spring-loaded self-closing
MC-5L1366B	• Self-closing below 45°, hold-open above 45°	Hold-open spring-loaded self-closing

11. Removal from wooden base (applicable to MC-5L1366B): Remove 8 screws from the left and right wooden base connecting plates (4 screws on front; 4 screws on rear). Push the refrigerator's side to detach one side from the wooden base. Afterward, pull out the wooden base, allowing that side of the refrigerator to land on the floor. Push the opposite side to detach it from the wooden base; then, remove the remaining base; finally, the refrigerator will completely land on the floor.

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Initial Power-on

When using the equipment for the first time, follow these steps:

After cleaning, place, and level the equipment, let it stand still for more than 24 hours before connecting to the power supply to ensure normal operation

AConnect the plug to a dedicated socket of appropriate specifications under no-load conditions

After connecting to the power supply, turn on the power switch of the equipment (situated at the upper right corner of the back of the cabinet)

Set the time, compartment temperature, and temperature alarm thresholds of the data recorder (refer to this Manual page 24 for modification methods)

For initial power-on, run the equipment unloaded for 24 hours to confirm normal functionality before loading items in batches. Ensure that each batch accounts forone-third (1/3) or less of the cabinet volume.

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- **Within 6 hours after initial power-on (ensure that the battery switch on the rear panel of the equipment is turned on), the overtemperature alarm will not be triggered.**

- **Backup battery:** The product has a backup battery, the switch of which is located at the upper right corner of the rear panel. The battery shares a switch with the machine. When the machine is powered on, the battery charges automatically; once fully charged, the battery stops charging without any user operation.

NOTE
The backup battery only supports the alarm system in working and cannot power the compressor.

- **Door heating function:** The product features an automatic door heating system, which automatically makes adjustments depending on ambient temperature and humidity without any user operation.

- **Automatic defrost function:** The product has an automatic defrost system, which collects and evaporates condensate water automatically, without any user operation.

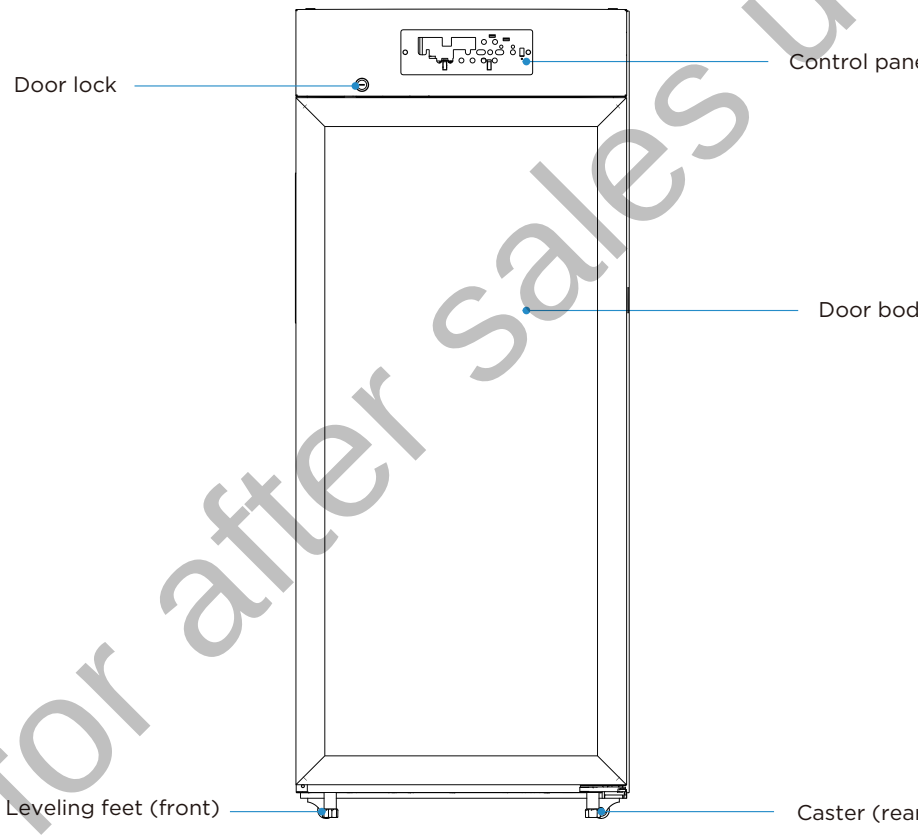
Operation after Power-off

- The setpoint is memorized by the equipment. After power resumption from a power failure, the equipment will resume operation with the set parameters before the power failure.
- Once the power is cut off, the refrigerator can only be re-energized after more than five minutes to avoid damage to the compressor or the system.
- When the refrigerator is about to stay unused for extended periods, remove the power plug and turn off the power switch to prevent electric shock, leakage, or fire due to aging of the power cord.
- If the refrigerator is going to be left unused in an unsupervised area for a long time, ensure that children do not have access to the refrigerator and its door is not closed completely.

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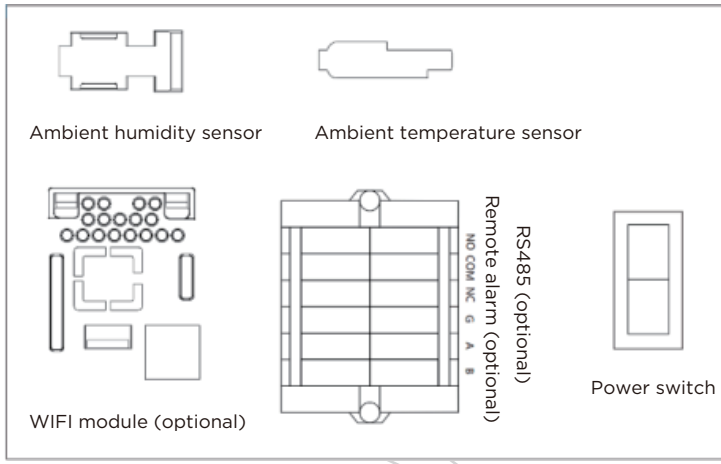
PRODUCT COMPOSITION & OVERVIEW

Schematic Diagram of Appearance



Schematic Diagram of MC-5L216

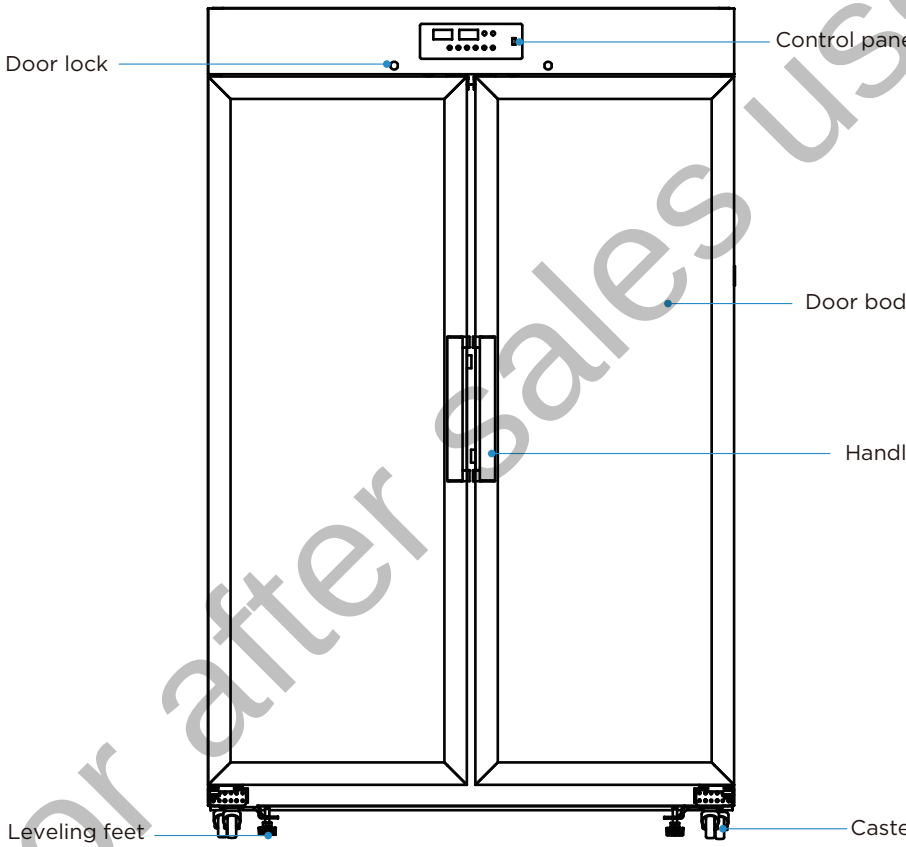
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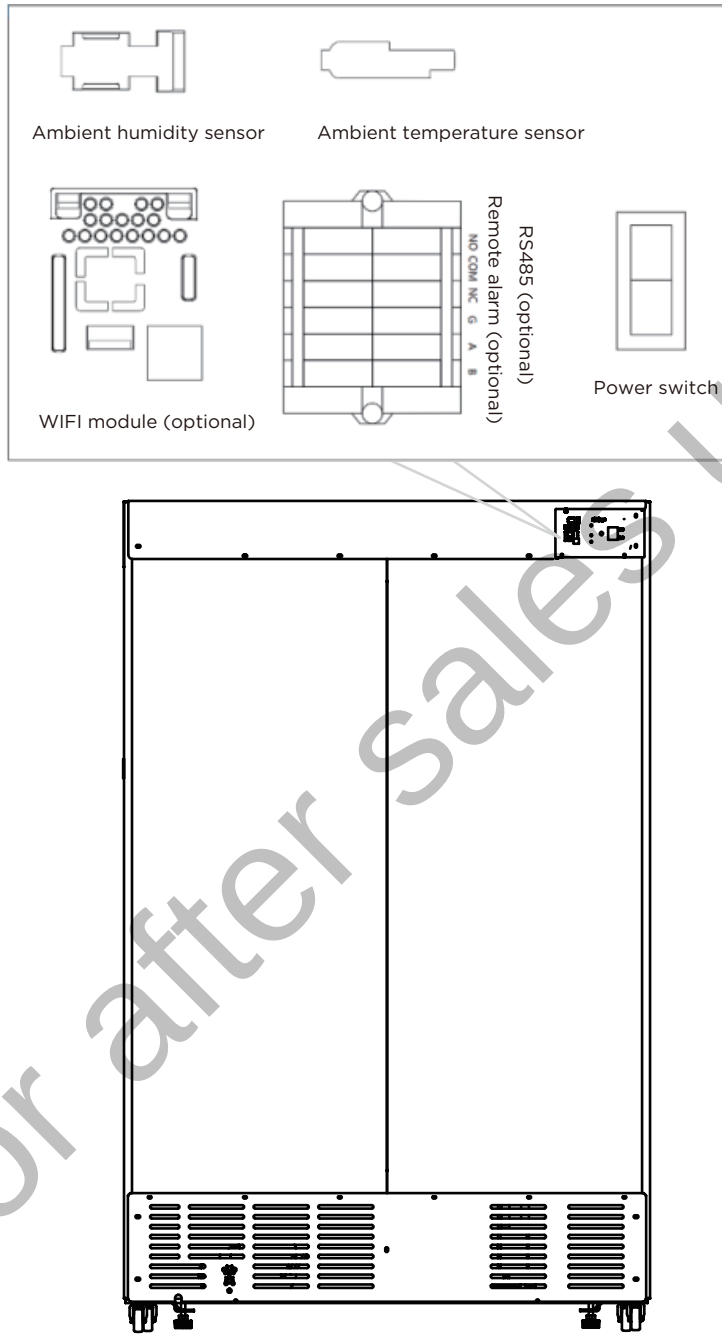
Schematic Diagram of MC-5L216

for after sales use



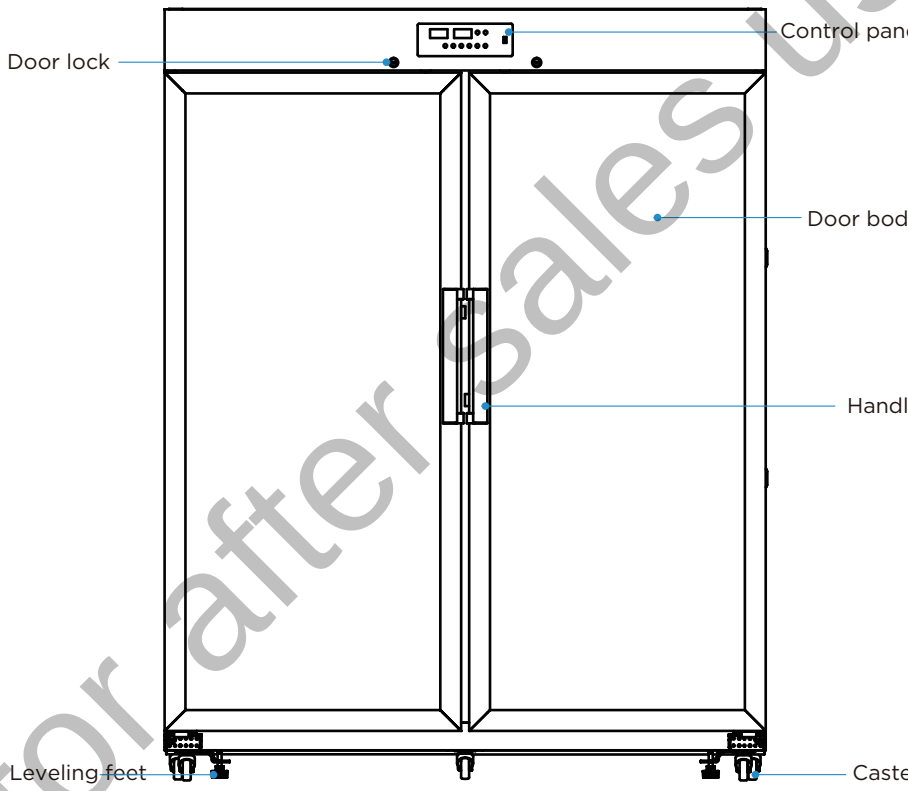
Schematic Diagram of MC-5L1036B

for after sales use



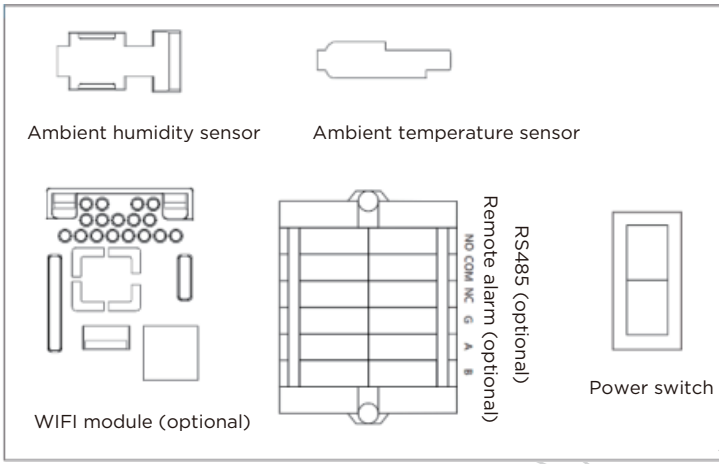
Schematic Diagram of MC-5L1036B

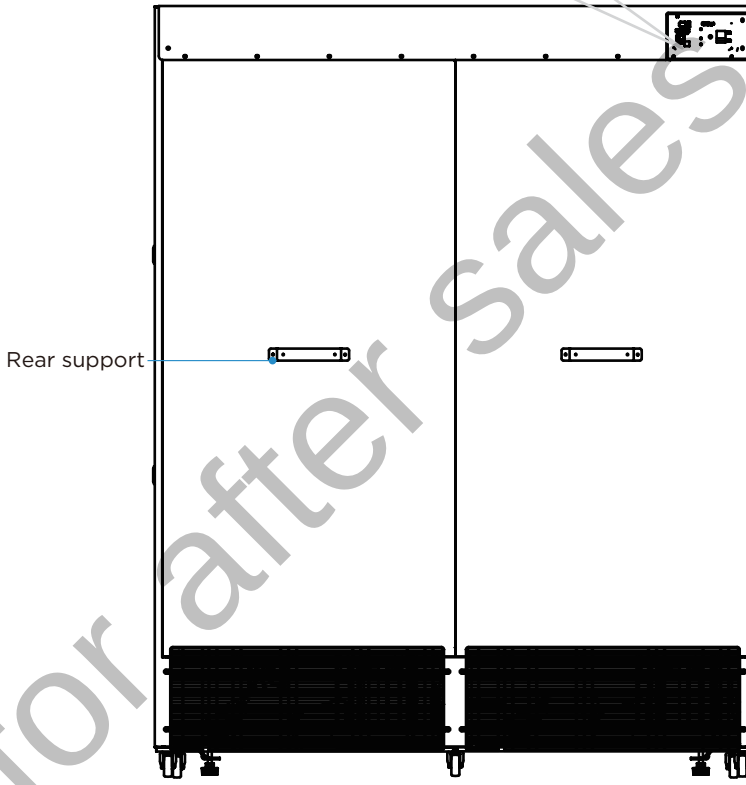
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Schematic Diagram of MC-5L1366B

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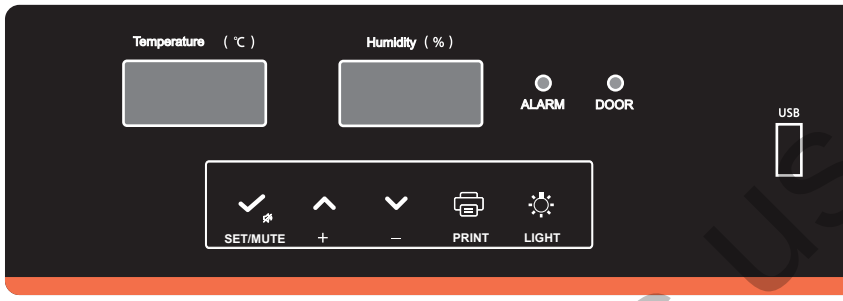
Schematic Diagram of MC-5L1366B

Due to product improvement and differences among models, the actual product may be different from the diagram. Please refer to the actual product!
The diagrams are only for a brief description of functional parts.

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OPERATING INSTRUCTIONS

Operation and Display Panel



Digital Tube Display Instructions

By default, if no alarm occurs, the left digital tube displays the compartment temperature, while the right digital tube displays the compartment humidity. If an alarm occurs, the left digital tube cycles between the alarm code and the compartment temperature. In menu mode, the left digital tube displays menu items (flashes when editing), while the right digital tube displays menu parameters (flashes during settings).

Indicator Light Status Description



Indicator light status	Alarm description
Alarm indicator light OFF	Refrigerator operating normally
Alarm indicator light ON	Refrigerator operating abnormally
Door opening indicator light OFF	Door is closed
Door opening indicator light ON	Door is open

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Key Functions

Safety Precautions

Key symbol	Key name
	“Set/Mute” multi-function key
	“Up” key
	“Down” key
	“Print” key
	“Light On/Off” key

NOTE

Pressing the "Set/Mute" multi-function key within 5s after power-on does not work

Key Locking/Unlocking Function

a) Locking: With the keys unlocked, they will lock after 60 seconds of inactivity or if you press and hold the “Up” and “Down” keys simultaneously until the buzzer beeps twice, then release them.

b) Unlocking: Press and hold the "Up" and "Down" keys until the digital tube shows "0000"; then, use the "Up" key to adjust up to "0005". Press the "Set/Mute" multi-function key to resume normal display (buzzer beeps once).

Ambient Temperature View Function

Press the "Set/Mute" multi-function key, and then the digital tube will display the ambient temperature. The normal display will resume after 5 seconds of inactivity.

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User Menu Access

With the key unlocked, press and hold the "Set/Mute" multi-function key until "PS1" appears on the digital tube. Use the "Up" or "Down" key to navigate other menus (see table below for menu items). Press the "Set/Mute" multi-function key to adjust parameters for the selected menu. After 60 seconds of inactivity or long pressing the "Set/Mute" multi-function key until the buzzer beeps once, the parameters will be saved and the system will exit.

Menu	Description	Setting range	Default value	Unit
MAX	MAX temperature value in the current period	——	——	℃
MIN	MIN temperature value in the current period	——	——	℃
CLR	Clear the MAX and MIN temperature records in the current period	0: Clear 1: Do not clear	1	/
SEt	Set temperature	2.0~8.0	5.0	℃
H	Upper deviation of high temperature alarm	0.0~10.0 0.0: Cancel alarm	3.0	℃
L	Lower deviation of low temperature alarm	0.0~10.0 0.0: Cancel alarm	3.0	℃
n	View current date - year	——	——	/
y	View current date - month	——	——	/
r	View current date - day	——	——	/
S	View current date - hour	——	——	/
F	View current date - minute	——	——	/
Pt	Printing interval	0~240	10	min
tH1	High ambient temperature alarm	20.0~50.0	40.0	℃
P2	Selection of display mode	1: Average temperature 2: Temperature of the upper compartment 3: Temperature of the lower compartment	1	/
PS1	User menu password settings	0000~0999	0005	/

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Note: The MAX/MIN values will automatically reset at midnight every day. For example, if the current date is 20250521, the MAX/MIN values will be the temperature MAX/MIN values within the time period from 20250521-00:00 to 20250521-23:59.

Light On/Off

While the refrigerator is operating normally, press the "Light On/Off" key to toggle compartment lights on or off.

Time Setting Function

In unlocked mode, press and hold the "Set/Mute" + "Up" keys for 3 seconds to enter time settings. The digital tube will display "n".
Use the "Up" or "Down" keys to navigate the parameters below in sequence

Menu	Description	Setting range	Remarks
n	Set the time of recorder module - year	10~50	25 for 2025
y	Set the time of the recorder module - month	1~12	——
r	Set the time of the recorder module - day	01~31	——
S	Set the time of the recorder module - hour	00~23	——
F	Set the time of the recorder module - minute	00~59	——
Pt	Printing interval	0~240	10min
SCY	Temperature data recorder period	0~240 0: Shielded recorder	10min

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Modifying "n"

Step	Operation	Digital tube display
1	Press the "Set/Mute" multi-function key → Digital tube displays "n"	n
2	Press the "Set/Mute" multi-function key	/
3	Adjust the parameter value to the target year using the "Up" or "Down" key	(e.g., 25 for 2025)
4	Press the "Set/Mute" multi-function key to save the parameter	/

Modifying "y" – Example (Other parameters like "r", "s", "F", "Pt", and "SCY" follow the same logic)

Step	Operation	Digital tube display
1	Press the "Set/Mute" multi-function key → Digital tube displays "y"	y
2	Press the "Set/Mute" multi-function key	/
3	Adjust the parameter value to the target year using the "Up" or "Down" key	(e.g., 7 for July)
4	Press the "Set/Mute" multi-function key to save the parameter	/

After completing the modifications to all parameters above, press and hold the "Set/Mute" multi-function key until the buzzer beeps twice, then release to save settings and exit. The digital tube will return to the normal display interface.

NOTE

Before modifying the year/month parameters of the system time, export all existing data records first; otherwise, data may be lost.

USB Data Export

Automatic export: Insert a USB drive into the USB port. Then, the buzzer beeps once. If the data volume is large, the digital tube displays "On". PDF files for data for the current month and the previous month are generated inside the USB drive. The digital tube displays "End" and then resumes normal display after 3 seconds.

Manual export: In unlocked mode, insert the USB drive. After "End" appears: Press the "Up" key for 3 seconds → digital tube displays "d01". Adjust "d01~d24" using the "Up" or "Down" keys. Press the "Set/Mute" multi-function key to generate a PDF file for the recorded data for the month (1~24) previous to the current time. Select "d00" to cancel this file generation.

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NOTE 1

If the data volume is small, the digital tube will not display "On" and "End" prompts.

NOTE 2

The USB drive needs to be formatted before use. The file system of the USB drive is in FAT32 format, with a capacity of not more than 32GB, and the USB drive cannot be partitioned. Please use USB drives of mainstream brands, such as Sandisk, Kingston, Sansung, etc.

NOTE 3

The following information is included in USB exports:

- Equipment information: model, capacity, version
- Equipment information: temperature recording cycle, temperature unit, sensor type, working mode, start time, number of records, upper and lower temperature limits, temperature over-limit alarm, humidity upper limit, humidity lower limit, humidity over-limit alarm
- Temperature information: over-limit alarm, MAX value, MIN value
- Humidity information: over-limit alarm, MAX value, MIN value
- Temperature Curve Chart
- Humidity Curve Chart
- Temperature data and alarm information

USB Data Deletion

In the Time Setting Function interface to modify the system time, if the year/month parameter of the time is modified, the temperature data record will be cleared after the time modification is successful; if only the day/hour/minute of the time is modified, the data will not be cleared after the time modification is successful. For example, when the time is modified from 2025.06.30 to 2025.07.16, the temperature data record will be cleared.

NOTE

Before modifying the year/month parameters of the system time, export all existing data records first; otherwise, data may be lost.

Alarm Test Function (Applicable to MC-5L1366B)

1. **Entering Alarm Test Function:**
   With the keys locked, press and hold the "Set/Mute" key for 5 seconds until the left digital tube displays "tESt". Then, the system will enter Test Mode.

2. **Alarm test process** (Includes audible alarm, visual alarm, and remote alarm terminal activation)
   In Test Mode, the main control board triggers all alarms sequentially; the display board shows corresponding alarm codes; meanwhile, the alarm indicator light turns on, and the buzzer emits intermittent sounds; the remote alarm relay activates. When alarm codes clear, the remote alarm deactivates automatically.

3. In the alarm test mode, the operator cannot stop the buzzer by pressing the "Mute" key.

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Quick View of MAX and MIN Values

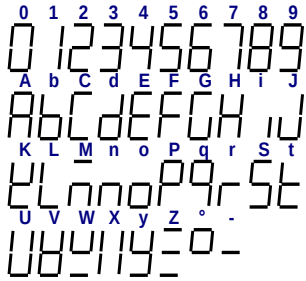
Shortcut to view MAX/MIN temperature values

With the keys locked:

1. Short press the "UP" key: "MAX" flashes three times, followed by the "MAX" value flashing three times;
2. hort press the "DOWN" key: "MIN" flashes three times, followed by the "MIN" value flashing three times;
3. Long press the "SET" + "UP" multi-function key for 3 seconds: the buzzer beeps twice; then, the "MAX and MIN" values clear. Values will be re-recorded.

Character Mapping Table

Since the refrigerator comes with a digital tube which cannot accurately display characters, please refer to the following character mapping table for digital tube display:



Remote Alarm Function

The product can be optionally equipped with a remote alarm function. When an alarm occurs, an alarm signal can be output through the remote alarm connector. Located in the top cover area of the product's rear panel, this remote alarm connector has a load-bearing capacity of DC 30V/2A. It features Normally Open (NO), Normally Closed (NC), and Common (COM) contacts. Users may select either NO or NC contact according to actual requirements, and we kindly recommend that the length of the remote alarm connecting cable not exceed 3m.

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NOTE 1

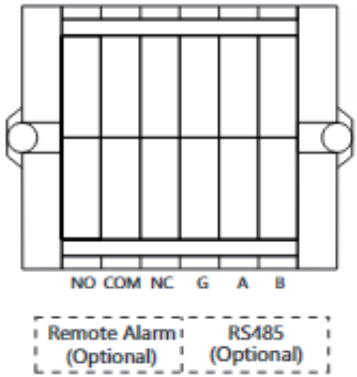
Regarding the remote alarm function, users need to install the alarm device themselves in conjunction with the remote alarm interface;

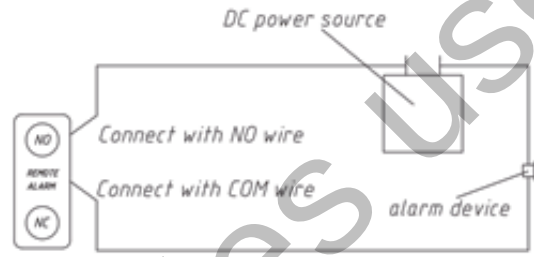
NOTE 2

Pressing the "Mute" key on the display screen can only mute the audible alarm, while the remote alarm status remains unchanged.

NOTE 3

All alarms can trigger the remote alarm function.





Remote Communication Function

This product can be optionally equipped with an RS485 remote communication function. Temperature data, alarm information, and other signals in the cryostat can be output to the user's monitoring software via the remote communication connector terminal. The RS485 connector terminal is located in the top cover area of the product's rear panel.
The remote communication connector has contacts such as RS485_A, RS485_B and GND. Among them, RS485_A and RS485_B are a pair of differential signals, which can be connected by users using twisted pairs.

Kindly Reminder: Product function configurations may vary. Please refer to the actual configurations.

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Alarm Code Description

Alarm code	Definition
H1	Refrigerator compartment high temperature alarm
L1	Refrigerator compartment low temperature alarm
H2	Ambient temperature high alarm
E1	Refrigeration control sensor fault
E2	Refrigeration display sensor fault
E4	Ambient temperature sensor fault
E5	Defrost sensor fault
E7	Humidity sensor fault
E8	Ambient humidity sensor fault
E9	Defrost sensor 2 fault (for MC-5L1366B)
E11	Refrigeration control sensor 2 fault (for MC-5L1366B)
do	Door open alarm
PF	Power failure alarm
BL	Low battery alarm
EE	Communication alarm
EC1	Refrigeration system 1 fault (For MC-5L1366B)
EC2	Refrigeration system 2 fault (For MC-5L1366B)

NOTE

If the alarm cannot be recovered, please call the after-sales service center.

Kindly Reminder: Product function configurations may vary. Please refer to the actual configurations.

Installation Environment

- When the alarm sounds, press the "Set/Mute" multi-function key to mute the alarm. The display interface will enter the "View Ambient Temperature" mode;
- When the alarm is muted, press the "Set/Mute" multi-function key to unmute the alarm. The display interface will enter the "View Ambient Temperature" mode;
- With the keys unlocked, in the "View Ambient Temperature" mode, press the "Set/Mute" multi-function key, and the system will toggle between muting and unmuting the alarm. If the alarm persists for 10min after being muted, the buzzer will beep again.

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MAINTENANCE

⚠ WARNING

- In order to prevent electric shocks or injuries, the power supply must be cut off before any repair and maintenance of the equipment.
- Make sure that drugs or suspended particles from the surrounding environment will not be inhaled during equipment maintenance. Otherwise, they may cause harm to human health.

⚠ CAUTION

- Do not spill water directly on the refrigerator body to avoid reduced insulation performance of electrical components and rusting of metal parts.
- Do not use hot water and corrosive cleaners or organic solvents to clean the refrigerator body.
- Do not put heavy objects on top of the equipment to avoid deformation of the equipment due to pressure.

Equipment Maintenance

Observe whether the equipment temperature is normal and whether there is an alarm

↓

Clean the refrigerator to maintain a brand-new appearance

↓

Use a dry cloth to wipe off light dust from the refrigerator shell and all accessories.
If the refrigerator is heavily soiled, use a clean cloth soaked in neutral detergent to remove dirt, wipe off residual detergent with a wet cloth, and finish with a dry cloth

↓

Open the rear cover plate of the compressor compartment; use a brush to dust off the condenser fins and clean the condensate water evaporation tray.

↓

Inspect the evaporator fan and condenser fan for normal operation to ensure optimal performance

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Replacement Cycle of Parts and Components

Product model	Standby battery	Evaporator fan	Condenser fan
MC-5L216	BP10826A	ZBYP-3-8-63	/
MC-5L1036B	BP10826A	ZBYP-3.5-8-90	ZBYP-3-8-62
MC-5L1366B	3S2P 10.8V	ZBYP-3-8-63	ZBYP-3-8-62
Replacement Period	3 years	5 years	5 years

Equipment Out of Service

Out of service:
Cut off the power supply if the equipment is about to stay unused for a long time and be stored in an unsupervised area. Clean the inside and outside surfaces of the compartment with a wet, soft cloth, let it dry, and then seal it. Make sure to lock the equipment to prevent children from opening the door against accidents such as asphyxiation.

Scrap:
When the equipment reaches its service life, it shall be scrapped for disposal. It must be handed over to qualified professional recycling organizations for disposal in accordance with local regulations and ordinances. Non-professional personnel shall not disassemble or dismantle the equipment without authorization. Scrapped equipment shall be placed in a designated area inaccessible to children to avoid danger.

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TROUBLESHOOTING AND REPAIR SERVICE

Any product may fail. Please observe the operation of the equipment in time during use. If there is any abnormality, please check and handle it according to the table below. If the problem cannot be solved, inform our Service Center in time, and we will do our best to help you and avoid any loss.

Fault	Troubleshooting
Refrigerator not working	Whether the input power supply meets the requirements
	Whether the plug and socket are in poor contact
	Whether the input and control lines are faulty
	Whether the voltage is too low
The refrigeration effect is not obvious Temperature exceeds the standard value	Whether too many items are stored or the items are too hot
	Whether there is a certain clearance between the stored items
	Whether there is direct sunlight or other heat source radiation
	Whether the door is opened frequently
	Whether the ambient temperature is too high
	Whether the air duct is blocked
Excessive noise	Whether the refrigerator is placed flatly
	Whether a part of the refrigerator body contacts external objects or the wall
	The difference between actual noise and marked value is normal during operation due to the influence of stored items, ambient noise, the door being ajar, compressor ON/OFF, etc.
The alarm lamp flashes Buzzer alarm	Whether the compartment temperature will rise when the item has just been put in, but it will automatically return to normal after a period of refrigeration
	The door is not completely closed. This is a door-opening alarm.
	Whether the temperature exceeds the standard value

NOTE

If the fault cannot be eliminated after the above items are checked, or the fault is different from those listed above, please contact the after-sales personnel.

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SPECIFICATION

Name	Pharmacy Refrigerator		
Model	MC-5L216	MC-5L1036B	MC-5L1366B
Electrical shock protection class	Class I		
Power supply	220~240V ~/50/60Hz		
Compartment temperature	2°C-8°C		
Refrigerant	R600a, 40g	R600a, 72g	R600a, 52g*2
Volume	216L	1036L	1366L
Rated current	1.5A	2.5A	4.7A
Weight	61kg	177kg	227kg
Shelf dimensions and MAX load-bearing capacity	500mm*360mm 24kg	547mm*518mm 36kg	688mm*562mm 45kg
Noise	45dB(A)	45dB(A)	35dB(A)
Product dimensions (W * D * H)	595*597*1452mm	1220*810*1925mm	1500*895*1925mm
Overall heat dissipation (BTU/h)	469	619	1259

Description of technical parameters:
The technical parameters in this table are measured under standard conditions. After the parameters are changed due to product improvement and technical update, no further notice will be given, which shall be subject to the nameplate attached to the refrigerator.

for after sales use

PACKING LIST

Model	User manual	Key	Accessory bag	Steel wire shelf, including mounting clips	Price list	Handle	Rear support
MC-5L216	1 copy	2 pcs	1 pc.	4	4	/	/
MC-5L1036B	1 copy	4 pcs	1 pc.	12	12	2 pcs	/
MC-5L1366B	1 copy	4 pcs	1 pc.	12	12	2 pcs	2

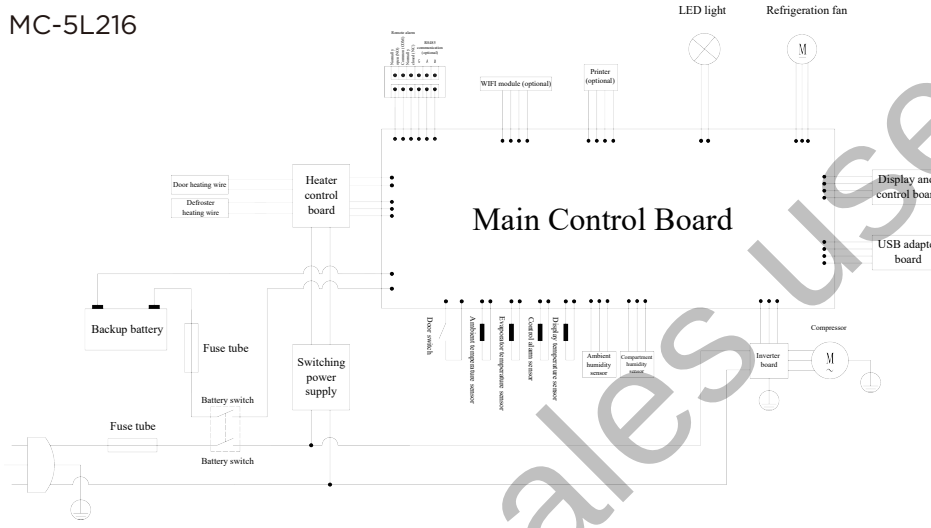
NOTE

Optional accessories such as an external padlock and a handle shall be subject to physical configuration.

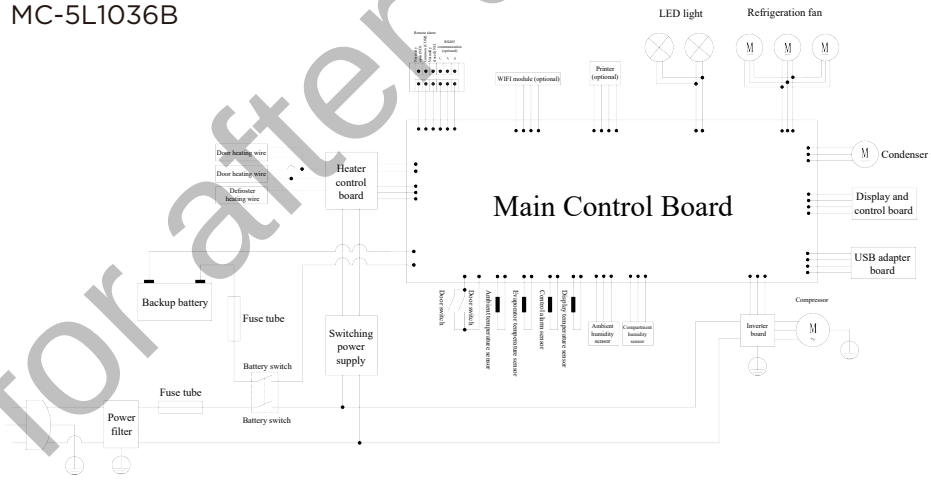
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ELECTRICAL SCHEMATIC DIAGRAM

MC-5L216



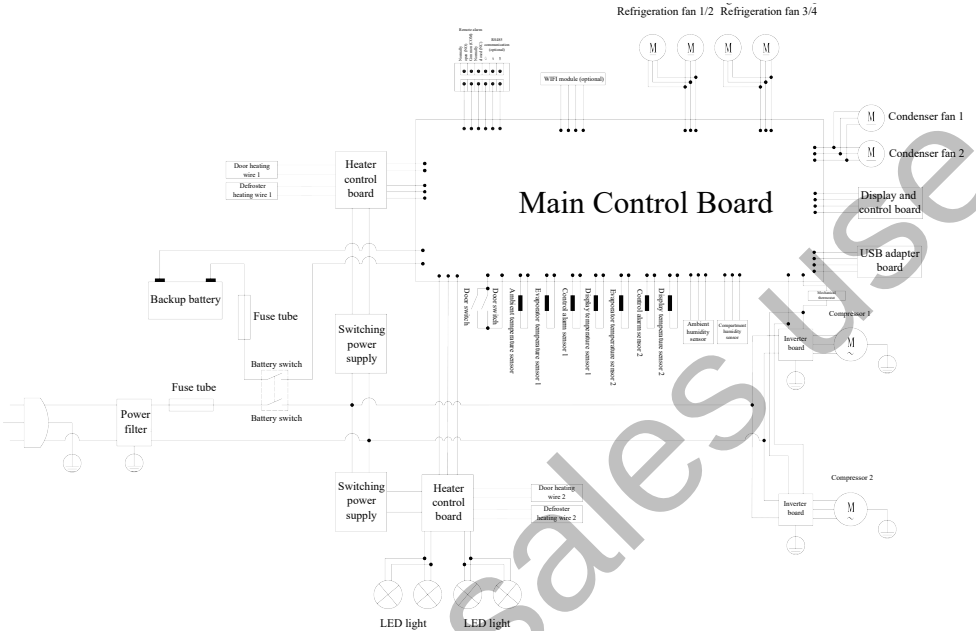
MC-5L1036B



NOTE

Some models do not include a running capacitor or condenser fan. Please refer to the actual product.

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NOTE

Some models do not include a running capacitor or condenser fan. Please refer to the actual product.

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