



Single Door, 23 Cu. Ft.

Freezer

MCF-23FDHC

Refrigerator

MCR-23FDHC



Double Door, 49 Cu. Ft.

MCF-49FDHC

MCR-49FDHC



Triple Door, 72 Cu. Ft.

MCF-72FDHC

## Bottom Mount, Reach-In Freezers & Refrigerators Instruction Manual

This manual contains important information regarding your unit. Please read this manual thoroughly prior to equipment set-up, operation, and maintenance. Failure to comply with regular maintenance guidelines outlined in this manual may void the warranty.

# IMPORTANT SAFEGUARDS

Please pay close attention to the safety notices in this section. Disregarding these notices may lead to serious injury and/or damage to the unit. Basic safety precautions must be followed when using electrical appliances as the following.



Refrigeration units that contain Hydrocarbon (R 290)

**DANGER** - Risk of fire or explosion. Flammable refrigerant used. Do not use mechanical devices to defrost refrigerator. Do not puncture refrigerant tubing.

**DANGER** - Risk of fire or explosion. Flammable refrigerant used. To be repaired only by trained service personnel. Do not puncture refrigerant tubing.

**CAUTION** - Risk of fire or explosion. Flammable refrigerant used. Consult repair manual/owner's guide before attempting to service this product. All safety precautions must be followed.

**CAUTION** - Risk of fire or explosion. Dispose of properly in accordance with federal or local regulations. Flammable refrigerant used.

**CAUTION** - Risk of fire or explosion due to puncture of refrigerant tubing; follow handling instructions carefully. Flammable refrigerant used.

**CAUTION** - Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.

## ATTENTION

- **DO NOT** attempt to remove or repair any component. Any servicing must be performed by a qualified technician.
- **DO NOT** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Before this appliance is used, it must be properly installed and located in accordance with the Installation Instructions.
- **DO NOT** store any flammable and explosive gas or liquids inside the unit.
- **DO NOT** store pharmaceutical products, scientific materials or other temperature sensitive products in this appliance.
- **DO NOT** spray any flammable gas near the refrigerator.
- **DO NOT** hang on the doors.
- **DO NOT** allow children to climb, stand or hang on the shelves in the refrigerator or doors. They could damage the refrigerator and seriously injure themselves.
- **DO NOT** allow children to touch or play with the control panel.
- **DO NOT** touch the cold surfaces in the refrigerator compartment when hands are wet. Skin may stick to these extremely cold surfaces.
- **DO NOT** stand or lean on the base panel, pull-out parts, doors and any other parts of the unit.
- **DO NOT** install this appliance at an improper location. The installation location should not be exposed to direct sunlight and not placed near any heat source, e.g. stove, oven, radiator, or etc.
- **DO NOT** put your hands under the unit when the unit is required to be moved.
- Keep fingers out of the "pinch point" areas; clearances between the doors and between the doors and cabinet are necessarily small; be careful closing doors when children are in the area.
- Any deterioration in the insulation may cause fire.
- This appliance must be grounded.



## PROPER GROUNDING REQUIRED

- To minimize shock and fire hazards, make sure that the unit is properly grounded.
- You must ground the appliance to prevent any power leakages or electric shocks caused by current leakage from the appliance. Never use gas pipes, telephone lines or other potential lightning rods as grounding.

## ELECTRICAL

- Refer to the electrical requirements on the nameplate. Ensure that the required voltage listed on the data plate is being supplied at all times.
  - \* Low or high voltage can detrimentally affect the refrigeration unit.
  - \* All units should be plugged into a grounded and properly-sized electrical outlet with appropriate over-current protection.
- **DO NOT** plug several appliances into the same wall outlet.
- To minimize shock and fire hazards, be sure not to overload outlet. Please use a dedicated outlet for your unit.
- Use caution, the unit does remain powered when system controls are used to turn off unit.
- **DO NOT** use an extension cord.
  - \* The power cord of this appliance is equipped with a grounding plug which mates with a standard grounding wall outlet to minimize the possibility of electric shock hazard from the appliance.
- **DO NOT**, under any circumstances, cut or remove the ground prong from the power cord.
  - \* For personal safety, this appliance must be properly grounded.
  - \* Have the wall outlet and circuit checked by a qualified electrician to make sure the outlet is properly grounded. If the outlet is a 2-prong outlet, it is your personal responsibility and obligation to have it replaced with the properly grounded wall outlet before using the unit.
  - \* A 3-prong outlet ensures the best performance and also prevents overloading building wiring circuits which could cause a fire hazard from overheated wires.
- **NEVER** unplug your refrigerator by pulling on the power cord.
  - \* Always grip plug firmly and pull straight out from the outlet.
- Repair or replace immediately all power cords that have become frayed or otherwise damaged.
  - \* **DO NOT** use a cord that shows cracks or abrasion damage along its length or at either end. Get it replaced immediately with a new cord installed by a licensed electrician.
- **DO NOT** attempt to alter or tamper with the electrical cord.
- If the power cord is damaged, it should be replaced by the manufacturer or service agent or a similarly qualified person in order to avoid a hazard.
- Make sure that the wire gauge and breaker sizes are correct and comply with the minimum allowance for voltage drops (rated  $\pm 10\%$ )
- Make sure the power cord is connected to the proper voltage. (Rated  $\pm 10\%$ )
- A protected circuit of the correct voltage and amperage must be used. (15 or 20 amps)
- Turn off the power switch before disconnecting the power cord whenever performing maintenance service or cleaning the refrigerated cabinet.
- If you have any questions about set up or installation of your refrigerator, call technical services group for assistance.

## UNPLUG CORD

- To minimize shock and fire hazards, please do not plug or unplug the cord with wet hands.
- Unplug unit before replacing the interior light.
- Unplug the appliance before cleaning and making repairs.
- When the unit is not in use for a long period of time, please unplug the unit from the outlet.
- After unplugging the unit, wait at least **5 minutes** before plugging back in.
  - \* Failure to do so could cause damage to the compressor.



## REPLACEMENT OF PARTS

- Component parts must be replaced with like components.
- Servicing shall be done by authorized service personnel, to minimize the risk of possible ignition due to incorrect parts or improper service.
- Lamps must be replaced by identical lamps only.
- If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.

## BEFORE INSTALLATION:

- If the unit has recently been transported please let unit stand still for a **minimum of 24 hours** before plugging it in.
- Make sure that the desired temperature is reached before loading the unit product.
- Make sure that there is proper ventilation around the unit in the area where it will operate.
- Make sure all accessories are installed (i.e. shelves, shelf clips, casters) before plugging the unit in.
- Make sure that the unit is not resting on or against the electrical cord and plug.
- Please read through the manual in its entirety.

## PROPER DISPOSAL OF EQUIPMENT

- Dispose of properly in accordance with federal or local regulations.

## DANGER! RISK OF CHILD ENTRAPMENT

- Child entrapment and suffocation are not problems of the past. Junked or abandoned refrigerators are still dangerous even if they will sit for "just a few days." If you are getting rid of an old refrigerator, please follow the instructions below to help prevent a terrible accident.
- Take off all of the doors.
- Leave the shelves in place so that children may not easily climb inside.
- Remove the electrical cord plug so it can't be operated.

## REFRIGERANT DISPOSAL

- Your old refrigerator may have a cooling system that uses "Ozone Depleting " chemicals. If you are throwing away your old refrigerator, make sure the refrigerant is removed for proper disposal by a qualified service technician. If you intentionally release any refrigerants you can be subject to fines and imprisonment under provisions of environmental regulations.
- Meet all local and Federal code provisions or requirements when disposing of any refrigerated appliance.

## INSTALLATION:

Before you start to install your unit, carefully inspect it for freight damage. If damage is discovered, immediately file a claim with the delivery freight carrier. THE LEGACY COMPANIES is not responsible for damage incurred during shipment.

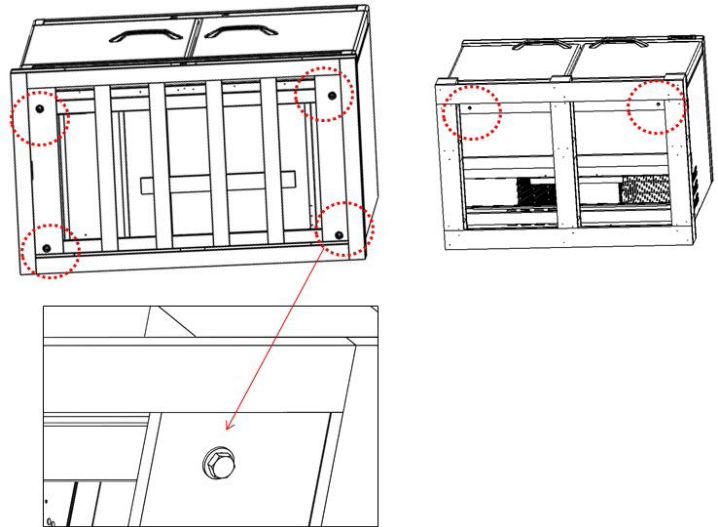
To ensure that your unit works properly from the first day, it must be installed properly. We highly recommend a trained refrigeration mechanic and electrician install your unit. If the installation is not up to professional standards, the appliance warranty can be voided.

## Tools Required

- Wrench (included with casters)
- Adjustable Wrench
- Screwdriver
- Leveler

## Uncrating

1. Move your unit as close to the final location as possible before uncrating.
2. Remove the wooden pallet:
  - \* Unscrew the bolts (4 - M6 Bolts)



3. Check all Part accessories listed are included with the appliance:

| MODELS         | CASTER BOX |     | SHELF CLIP |               | SHELF     |               |
|----------------|------------|-----|------------|---------------|-----------|---------------|
|                | PART NO.   | QTY | PART NO.   | QTY           | PART NO.  | QTY           |
| MCR/MCF-23FDHC | R834E-130  | 4   | R8429-150  | 1 set (20 ea) | R836A-570 | 1 set (5 ea)  |
| MCR/MCF-49FDHC | R834E-130  | 4   | R8429-150  | 2 set (40 ea) | R836A-580 | 2 set (10 ea) |
| MCR/MCF-72FDHC | R834E-140  | 6   | R8429-150  | 3 set (60 ea) | R836A-580 | 2 set (10 ea) |
|                |            |     |            |               | R836A-590 | 1 set (5 ea)  |

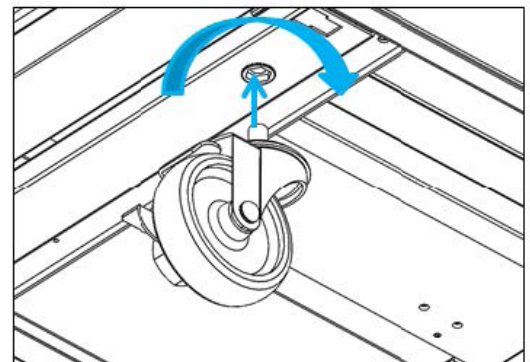
- \* Keys for door locks are in manual packet

## Location Guidelines:

- **Install the unit on strong and leveled surfaces**
  - \* Unit may make abnormal noises if surface is uneven
  - \* Unit may malfunction if surface is uneven
- **Install the unit in an indoor, well-ventilated area**
  - \* Unit performs more efficiently in a well-ventilated area
  - \* For best performance, please maintain clearance of 3" (7.6 mm) around the unit
  - \* Outdoor use may cause decreased efficiency and damage to the unit
- **Avoid installation in a high humidity and/or dusty area**
  - \* Humidity could cause unit to rust and decrease efficiency of the unit
- **Select a location away from heat and moisture-generating equipment**
  - \* High ambient temperatures will cause the compressor to overwork, leading to higher energy bills and gradual breakdown of the unit.

## Assembling Casters:

1. Install casters in the bottom rails assembly on the bottom of the unit.
2. It is important in order to achieve maximum strength and stability of the unit that you ensure that each caster is securely tightened with a 3/4" (19mm) open-ended wrench.
3. Casters with brakes must be installed in front. Casters must be in contact firmly with the bottom rails of the unit.



## Leveling:

Proper leveling of your unit is critical to operating success. Effective condensate removal and door operation will be effected by leveling.

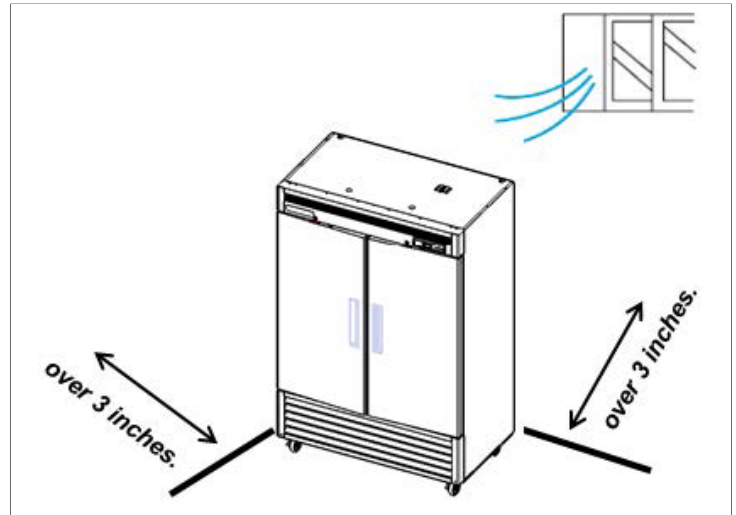
1. The unit should be leveled front to back and side to side with a level.
  2. For unit with casters: Four shims have been provided in the caster package for leveling unit with casters units positioned on uneven floors. Shims must be positioned between rail end and bearing race.
  3. If the cabinet is not level, use a 3/4" (19mm) open-end wrench to turn the anchoring bolt under the bearing race counter-clockwise until the cabinet is level.
  4. Install the desired number of shims, making sure the slot of the shim is in contact with the threaded stem of the caster.
  5. If more than one shim is used, turn the slot at a 45° angle at least so they are not in line.
  6. Turn the anchoring bolt clockwise with a 3/4" (19mm) open-end wrench to tighten and secure the caster
  7. Ensure that the drain hose or hoses are positioned in the condensate water pan.
  8. Untangle plug and cord from unit (do not plug unit into power supply while leveling).
  9. The unit should be placed close enough to the electrical supply so that the extension cords are never used.
- **WARNING:** Compressor warranties are void if the unit is more than 6-1/2 ft. (2m) from its receptacle. The outlet used for this connection must be relocated if it exceeds this length - 6-1/2 ft. (2m)
  - **CAUTION:** To avoid damage to lower rail assembly, raise unit slowly and carefully to upright position. If the unit was turned on its back or angled back more than 30°- the unit must be left in an upright position for at least 24 hours to allow the oil in the refrigerant to become re-equilibrated before the unit is plugged in or turned on. Failure to do this voids its warranty and may damage the compressor or refrigeration system.

## Ventilation:

- Set unit in its final location.
- Be sure there is adequate ventilation in your room.
- You may need to install an exhaust fan under the extreme heat conditions, (90°F+, 32°C+)
- **WARNING:** Warranty is void if ventilation is insufficient.

## Space Clearance:

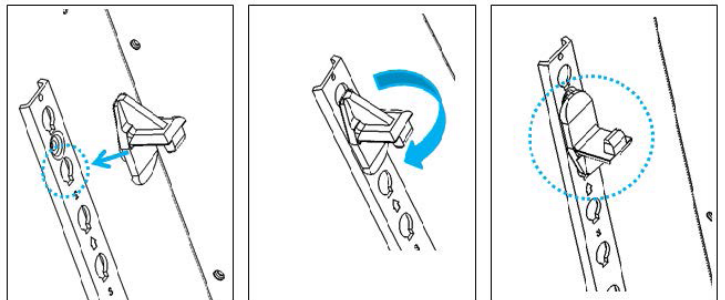
- Ensure air circulation around unit.
- For best performance, please maintain clearance of 3" ( 7.6 mm) around the unit



## Assemble Shelf Clips:

Install all the shelf clips before installing the shelves.

1. Put the tap back side of clip into the hole of the pilaster.
2. Rotate the clip with 180 degree.
3. Install the clips as shown then install shelves.



## OPERATION GUIDE

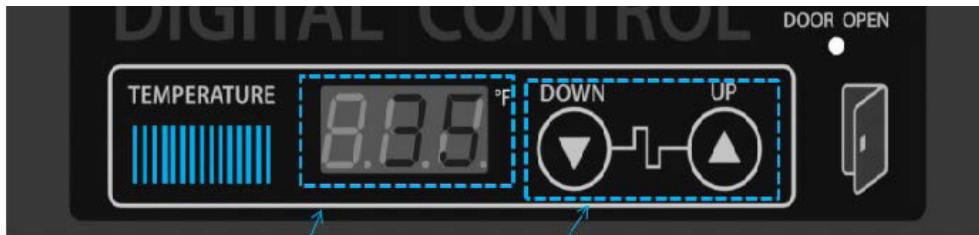
## Temperature Control Range

| MODELS        | TEMPERATURE RANGE                        |
|---------------|------------------------------------------|
| Freezers      | Holds -10°F to -5°F (-23.3°C to -20.6°C) |
| Refrigerators | Holds 28°F to 39°F (-2.2°C to -3.9°C)    |

## Operations

- Connect the power to the unit, the display panel will light up and the compressor will begin to run
- The compressor is automatically cycled by the electronic controller.
- The interior light is activated by the door switch when the door is open.
- Evaporator fan motors will run after all doors are completely closed.
- By pushing the UP/DOWN button, you can set the cabinet temperature.
- If door is opened, door opening indicator will be turned on.

## Control Panel



### Default set temperature

- Refrigerator: 35° F (2°C)
- Freezer: 0°F (18°C)

Temperature, Inside

Temperature control

- **Once you've determined an ideal set point**
  - \* (37°F for a refrigerator & 5°F for freezers are the most common & popular values); the thermal regulation may require fine tuning {field testing experience shows a 3°F differential setting delivers proper holding conditions, an appropriate refrigeration system cycle time and may extend the life of your appliance}

## MAINTENANCE

- **WARNING:** Disconnect power cord before cleaning any parts of the unit.

## Condenser Coil

- Condensers require cleaning **every 30 days**.
- Proper cleaning involves removing dust from the Condenser, by using a soft brush, vacuuming the condenser with a shop vac, using CO2, nitrogen, or pressurized air.
- If you cannot remove the dirt adequately, please call your refrigeration service company. Dust collected on condenser coil will cause unit to malfunction. For efficient operation, it is important that the condenser surface be kept free of dust, dirt, and lint.
- Take care not to bend the fins on the condenser.
  - \* Brush the condenser fins from top to bottom, not side to side.

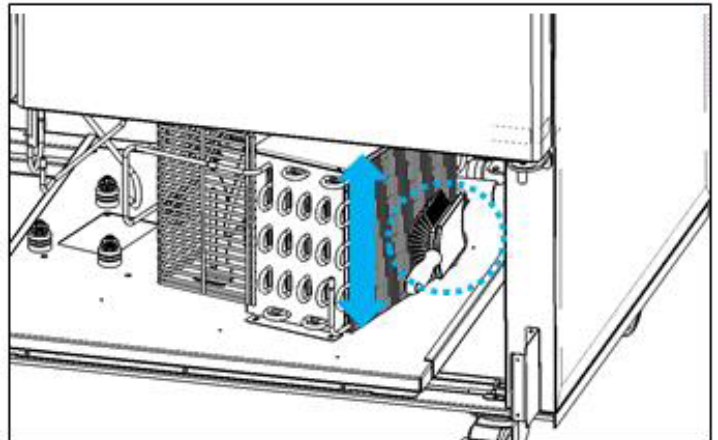
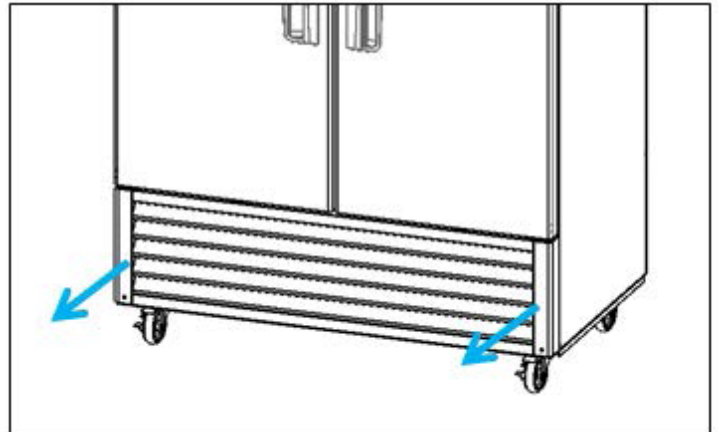
- \* After cleaning, straighten any bent condenser fins with a fin comb.

### Tools Needed

- Screwdriver
- Vacuum cleaner
- N2 or CO2 Tank
- Soft Bristle Brush
- Soft Cloth

### Cleaning the Condenser Coil

1. Disconnect power to unit
2. Take off grille at the bottom front by removing screws.
3. Unscrew the base of the compressor and pull it out carefully until you have enough space to clean condenser coil.
  - \* Do not make bend or pinch tubes and wires.
4. Clean off accumulated dirt from the condenser, fan blades, and motor with a vacuum, soft bristle brush, and/or clean cloth.
  - \* Brush the condenser fins from top to bottom.
  - \* If needed, use a commercial condenser coil cleaner, available from any kitchen equipment retailer.
  - \* Fan blades only - If soil is resistant, then dampen the cloth with warm water and mild soap to clean the fan blades. Wipe dry with soft cloth.
  - \* Avoid getting the fan motor wet - to prevent moisture damage, cover motor.
5. Reinstall the base and grille in the reverse order of disassembly. Tighten all screws.
6. Plug the unit to power and check that the compressor and fan are working.



### Cleaning the Cabinet:

- When cleaning the cabinet interior and exterior, use a solvent of warm water and mild soap.
- **DO NOT** use steel wool, caustic soap, abrasive cleaners, or chlorine-based cleaners and sanitizers that may damage the stainless steel surface.
- Wash door gaskets on a weekly basis.
  - \* Door gaskets should be thoroughly wiped down, including the sides, weekly.
  - \* Check door gaskets for proper seal after they are cleaned.
- Periodically, clean and wipe down the shelves with mild soap and warm water.



### Cleaning the Evaporator

- If you need to clean the evaporator, please contact the qualified service technicians.

### Check after cleaning

- Check the unit again for safety.
- Check if the unit is operating properly.

### Tips that help prevent rusting on stainless steel

- Use soft cloths or plastic scouring pads that will not harm the stainless steel's passive layer
- Use the correct cleaning tools.
- When cleaning your stainless steel products that make sure to use non abrasive.
- Cleaning along stainless steel finish line.
- Always scrub parallel to visible lines on stainless steels. Use a plastic scouring pad or soft cloth when you cannot see the grain.
- Use the cleaners that are either Alkaline, Alkaline chlorinated or Non Chloride based.
- Avoid cleaners containing quaternary salts as they can attack stainless steel, causing pitting and rusting.
- Clean your equipment frequently.

### Water Treatment.

- It is recommended to use soft water when possible to reduce deposits. Installation of certain filters can remove corrosive and distasteful minerals .
- Talk to a water treatment specialist if you are not sure of the proper water treatment

### TROUBLE SHOOTING

- Before requesting any service on your unit, please check the following points. Please note that this guide serves only as a reference for solutions to common problems.

| SYMPTOM                   | POSSIBLE CAUSE                  | CORRECTIVE ACTION                     |
|---------------------------|---------------------------------|---------------------------------------|
| Compressor will not start | Power connection failure.       | Check Power Cord and plug it in       |
|                           | Power switch is in off position | Ensure switch is in the "on" position |



| SYMPTOM                            | POSSIBLE CAUSE                                             | CORRECTIVE ACTION                                                                            |
|------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| The unit does not refrigerate well | Temperature set point is too high                          | Correct temperature set point                                                                |
|                                    | The door is opened too frequently                          | Minimize door opening                                                                        |
|                                    | Loading of too much warm or moist product                  | Load product in intervals                                                                    |
|                                    | Not enough ventilation                                     | Move the unit to a well ventilated location with at least 3 inches of clearance on all sides |
|                                    | Condenser is clogged                                       | Clean it                                                                                     |
| Condensation on cabinet exterior   | High moisture air can produce dews during the rainy season | Wipe with cloth                                                                              |

- \* A water-flowing sound can be heard when the unit is operating. This is the sound of refrigerant flowing.

#### RETAIN THIS MANUAL FOR FUTURE REFERENCE

- Please read the entire manual carefully before installing and operating. If certain recommended procedures are not followed, warranty claims will be denied.

|                       |  |
|-----------------------|--|
| <b>MODEL#:</b>        |  |
| <b>SERIAL#:</b>       |  |
| <b>PURCHASE DATE:</b> |  |

Notice: We reserve the right to make changes in design and specifications without prior notice.



## SPECIFICATIONS

| SKU                               | MCF-23FDHC                            | MCF-49FDHC                             | MCF-72FDHC                             | MCR-23FDHC                            | MCR-49FDHC                             |
|-----------------------------------|---------------------------------------|----------------------------------------|----------------------------------------|---------------------------------------|----------------------------------------|
| Category                          | Freezer                               | Freezer                                | Freezer                                | Refrigerator                          | Refrigerator                           |
| Unit Dimensions (in)<br>L x W x H | 31" x 26.75" x 82.75"                 | 31" x 54" x 82.75"                     | 31" x 81" x 82.75"                     | 31" x 26.75" x 82.75"                 | 31" x 54" x 82.75"                     |
| Capacity                          | 23 cu. ft.                            | 49 cu. ft.                             | 72 cu. ft.                             | 23 cu. ft.                            | 49 cu. ft.                             |
| Voltage                           | 115V                                  | 115V                                   | 115V                                   | 115V                                  | 115V                                   |
| Defrost Wattage                   | 450W                                  | 600W                                   | 810W                                   | n/a                                   | n/a                                    |
| Amperage                          | 5.6A                                  | 5.5A                                   | 9.9A                                   | 2A                                    | 2.4A                                   |
| Power Supply                      | 1ph                                   | 1ph                                    | 1ph                                    | 1ph                                   | 1ph                                    |
| HP                                | 1/2                                   | 1/2                                    | 1                                      | 1/4                                   | 1/4                                    |
| Cord Length (in)                  | 118"                                  | 118"                                   | 118"                                   | 118"                                  | 118"                                   |
| Plug Type                         | NEMA 5-15P                            | NEMA 5-15P                             | NEMA 5-15P                             | NEMA 5-15P                            | NEMA 5-15P                             |
| Number of Shelves                 | 5                                     | 10                                     | 15                                     | 5                                     | 10                                     |
| Temperature Range (°F)            | -10° to -5°                           | -10° to -5°                            | -10° to -5°                            | 28° to 39°                            | 28° to 39°                             |
| Refrigerant Type                  | R-290                                 | R-290                                  | R-290                                  | R-290                                 | R-290                                  |
| Refrigerant Ounces                | 2.33 oz                               | 4.44 oz                                | 5.08 oz                                | 2.54 oz                               | 3.46                                   |
| Product Weight (lbs)              | 284.0                                 | 403.0                                  | 650.0                                  | 271.0                                 | 397.0                                  |
| Shipping Weight (lbs)             | 321.0                                 | 470.0                                  | 647.0                                  | 313.0                                 | 442.0                                  |
| Included Components               | (4) Casters,<br>(5) PE Coated Shelves | (4) Casters,<br>(10) PE Coated Shelves | (4) Casters,<br>(15) PE Coated Shelves | (4) Casters,<br>(5) PE Coated Shelves | (4) Casters,<br>(10) PE Coated Shelves |