REFRIGERATION AVANTCO®

# User Manual

09/2024

# Ice Cream Dipping Cabinets

## White Models:

| | |
|---|---|
| **#178CPW47HC** | 47⅛" - 8 Tub |
| **#178CPW68HC** | 67¾" - 12 Tub |
| **#178CPW88HC** | 88¾" - 16 Tub |

## Stainless Steel Models:

| | |
|---|---|
| **#178CPSS47HC** | 47⅛" - 8 Tub |
| **#178CPSS68HC** | 67¾" - 12 Tub |
| **#178CPSS88HC** | 88¾" - 16 Tub |

## Note:

Read the manual thoroughly prior to equipment setup, operation, and maintenance.

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Ice Cream Dipping Cabinets

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Intertek 3029079

Intertek 3029079

NEMA 5-15P

# Safety

## Warning

**DANGER** – RISK OF FIRE OR EXPLOSION. FLAMMABLE REFRIGERANT USED. TO BE REPAIRED ONLY BY TRAINED SERVICE PERSONNEL. DO NOT PUNCTURE REFRIGERANT TUBING.

**PELIGRO** – RRIESGO DE INCENDIO O EXPLOSION. REFRIGERANTE INFLAMABLE UTILIZADO. PARA SER REPARADO SOLAMENTE POR PERSONAL DE SERVICIO CALIFICADO. NO PINCHAR LA TUBERÍA REFRIGERANTE.

**DANGER** – RISQUE DE FEU OU D'EXPLOSION. LE FRIGORIGÈNE EST INFLAMMABLE. CONFIER LES RÉPARATIONS À UN TECHNICIEN SPÉCIALISÉ. NE PAS PERFORER LA TUBULURE CONTENANT LE FRIGORIGENE.

**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.

**ATENCION** – RIESGO DE INCENDIO O EXPLOSIÓN. REFRIGERANTE INFLAMABLE UTILIZADO. CONSULTE EL MANUAL DE REPARACIÓN / GUÍA DEL PROPIETARIO ANTES DE INTENTAR DAR SERVICIO A ESTE PRODUCTO. DEBEN CUMPLIR CON TODAS LAS PRECAUCIONES DE SEGURIDAD.

**ATTENTION** – RISQUE DE FEU OU D'EXPLOSION. LE FRIGORIGÈNE EST INFLAMMABLE. CONSULTER LE MANUEL DU PROPRIÉTAIRE/GUIDE DE RÉPARATION AVANT DE TENTER UNE RÉPARATION. TOUTES LE MESURES DE SÉCURITÉ DOIVENT ÊTRE RESPECTÉES.

**CAUTION** – RISK OF FIRE OR EXPLOSION DUE TO PUNCTURE OF REFRIGERANT TUBING; FOLLOW HANDLING INSTRUCTIONS CAREFULLY. FLAMMABLE REFRIGERANT USED.

**ATENCION** – RIESGO DE INCENDIO O EXPLOSIÓN DEBIDO A LA PERFORACION DE LA TUBERÍA REFRIGERANTE; SIGA LAS INSTRUCCIONES DE MANIPULACIÓN CON CUIDADO. REFRIGERANTE INFLAMABLE UTILIZADO.

**ATTENTION** – RISQUE DE FEU OU D'EXPLOSION SI LA TUBULURE CONTENTANT LE FRIGORIGÈNE EST PERFORÉE; SUIVRE LES INSTRUCTIONS DE MANUTENTION AVEC SOIN. LE FRIGORIGÈNE EST INFLAMMABLE.

**CAUTION** – RISK OF FIRE OR EXPLOSION DUE TO FLAMMABLE REFRIGERANT USED. FOLLOW HANDLING INSTRUCTIONS CAREFULLY IN COMPLIANCE WITH LOCAL GOVERNMENT REGULATIONS.

**ATENCION** – RIESGO DE INCENDIO O EXPLOSIÓN DEBIDO A REFRIGERANTE INFLAMABLE UTILIZADO. SIGA LAS INSTRUCCIONES DE MANIPULACIÓN CON CUIDADO CONFORME A LAS REGLAS DE LA MUNICIPALIDAD.

**ATTENTION** – RISQUE DE FEU OU D'EXPLOSION SI LE FRIGORIGÈNE EST INFLAMMABLE. SUIVRE LES INSTRUCTIONS DE MANUTENTION AVEC SOIN CONFORMÉMENT AUX RÈGLEMENTATION GOUVERNEMENTALE LOCAUX.

# Installation

**Read this manual thoroughly prior to equipment setup, operation, and maintenance. This unit is intended for use in a temperature-controlled environment less than 75°F and 60% relative humidity.**

**IMPORTANT** – Read Before Installation:

- If the unit has recently been transported on its side, let unit stand upright for a minimum of 24 hours before plugging it in.
- Make sure that the unit has reached the desired temperature before loading the unit with products. This unit is meant for keeping cold products cold, not chilling warm products.
- 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.
- Do not attempt to remove or repair any component of the unit. Consult an authorized service technician for servicing/repair.
- Do not sit or stand inside the unit.
- Read through the manual in its entirety.
- This unit is designed to perform in a temperature-controlled environment at 60% relative humidity. The unit should be located away from doors, air ducts, and fans that could disrupt airflow and negatively impact performance.

# Cabinet Location Guidelines

- Install the unit on a strong and leveled surface.
  - If the surface is uneven, the unit may be noisy.
  - The unit may malfunction if the surface is uneven.
- Install the unit in an indoor, well-ventilated area.
  - For best performance, please maintain clearance of 4” on the front and back of the unit.
  - Do not use outdoors. For indoor use only.
  - Avoid direct sunlight.
- Avoid installation in a high humidity and/or dusty area.
  - Humidity above 60% can cause the unit to rust, collect condensation, and may decrease efficiency.
  - Dust collected on the condenser coil will cause the unit to malfunction.
  - Malfunctions due to temperatures above 75°F Fahrenheit, humidity above 60%, or improperly maintained condenser coil will void the warranty.
- Select a location away from heat and moisture-generating equipment.
  - Ambient temperatures above 75°F may cause the compressor to malfunction.
  - For optimal performance, the unit should not be used in environments with ambient temperatures exceeding 75°F.
  - The unit should not be placed in areas with an ambient temperature over 90°F.
  - Equipment malfunctions due to ambient temperatures above 90°F could void the warranty.
  - Do not install this unit inside a closet of alcove.

# Product Placement

- Corners of the freezer will be the coldest due to the cold wall surrounding the tubs on two sides. Tubs that are less than half full in the corners of the case may be hard to scoop.
- For ease of use, keep full tubs in the corners.
- The case will be colder closer to the bottom.

# Electrical

- Ensure that the required voltage is being supplied at all times.
- The unit should be plugged into a grounded and properly-sized electrical outlet with appropriate over-current projection. NEVER USE AN ADAPTER PLUG! Refer to the electrical requirements on the unit's nameplate.
- This unit should have its own dedicated circuit.
- Do not use extension cords.
- Ensure the unit is not resting on or against the electrical cord.
- If the unit is not in use for a long period of time, unplug the unit from the outlet.
- To avoid shock and fire hazards, do not plug in or unplug the unit with wet hands.
- After unplugging the unit, wait at least 10 minutes before plugging it back in. Failure to do so could cause damage to the compressor.

# Functions

### ADJUSTING TEMPERATURE

**Your new freezer is already factory set to run at optimum temperatures for food safety and ice cream scooping and should require no adjustments.**

Units are set to cycle between a minimum temperature of -15°F and a maximum temperature of -11°F. Ice cream should be served between 6-10°F.

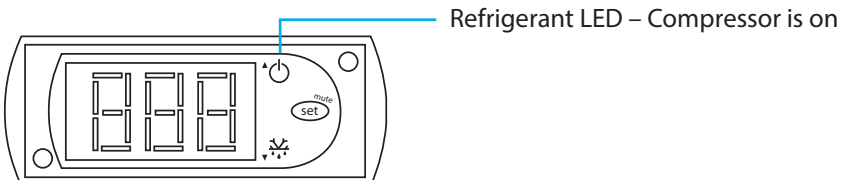
Adjusting the temperature changes the minimum temperature your unit will run at. Your unit will not run constantly at this setting. To change it, follow these instructions:

# Digital Control Units

- Hold “SET” for 1 sec. The display will flash the current minimum temperature.
- Use the arrow buttons to adjust the minimum temperature.
- Press “SET” again to save your settings.

Always remember to calculate the differential if you change the minimum temperature setting. The cabinet temperature will fluctuate up to +4 degrees over your set minimum temperature as the compressor runs and shuts off. Setting the temperature too high will result in unsafe maximum temperatures and possible health code violations. After temperature adjustment, always allow at least 24 hours for the product to conform to the adjusted temperature.

### Controls




### Please Note

- The sound of water flowing during operation is normal; this is the refrigerant.
- When the humidity is high, condensation may form on the surface of the freezer.
- When the freezer is running, the condenser and compressor will be hot.
- For best performance, install where the temperature is below 75°F and 60% humidity.

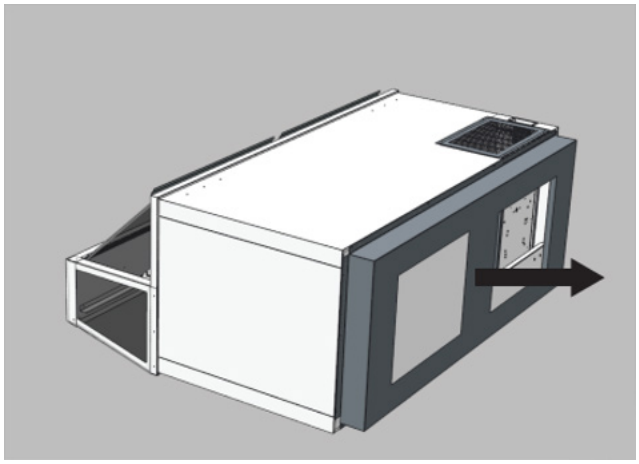
### Running a Manual Defrost Cycle

- Remove the user side grill at the base of the unit.
- Remove the drain hose and place it in a pan to catch the water.
- Remove rubber plug inside unit and defrost unit by unplugging the machine or using the controller to power OFF.
- Defrost can take up to 2 hours. Remove product before defrosting.
- Always reinstall rubber plug after defrosting or water may drip on to the floor.

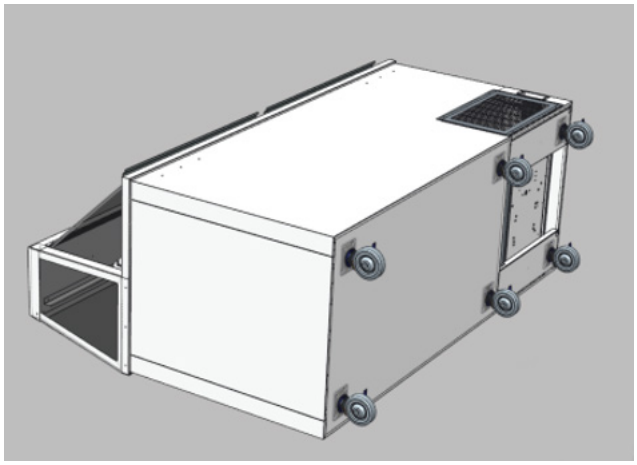
**WARNING:** Always reinstall drain plug after defrosting. Case does not contain a drain pan. Water must be drained into a pan outside of the case.

# Caster Installation

1. Lay the unit down and loosen the base screw (pay attention to the protection of the product when placing it down).



2. Remove the base.
3. Install the casters.



**NOTE:** After adding the casters, allow the unit to sit upright for 24 hours before plugging into an electrical outlet.

# Tub Inserts and Covers Installation

- Insert wire baskets to hold ice cream tubs.
- Insert ice cream tubs into baskets with the lids removed.
- Place tub covers over ice cream tubs to lock ice cream into place.
- Designed for 10" x 10" 3-gallon tubs.

# Safety / Warning

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.

**ATTENTION**

- To minimize shock and fire hazards, be sure not to overload outlet. Designate one circuit for your unit.
- Do not use extension cords.
- Do not put your hands under the unit while it is being moved.
- 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 10 minutes before plugging it back in. Failure to do so could cause damage to the compressor.

**UNPLUG CORD**

- To minimize shock and fire hazards, do not plug or unplug the cord with wet hands.
- During maintenance and cleaning, unplug the unit.

**PROPER GROUNDING REQUIRED**

- To minimize shock and fire hazards, make sure that the unit is properly grounded.

**WARNING**

- Do not attempt to remove or repair any component unless instructed by factory.
- Make sure that the unit is not resting on or against the electrical cord and plug.
- To minimize personal injury, do not hang on the doors.
- Do not store any flammable and explosive gas or liquids inside the unit.
- Do not attempt to alter or tamper with the electrical cord.

# Operation / Maintenance

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

**NOTE:** We strongly recommend that any servicing be performed by an authorized service technician.

## Cleaning the Fan Blades and Motor

- If necessary, clean the fan blades and motor with a soft cloth.
- If it is necessary to wash the fan blades, cover the fan motor to prevent moisture damage.

## Cleaning the Interior of the Unit

- When cleaning the cabinet interior, use a solvent of warm water and mild soap.
- Do not use steel wool, caustic soap, abrasive cleaners, or bleach that may damage the interior finish.
- Wash door gaskets on a regular basis, preferably weekly. Simply remove the door gasket from the frame of the door, soak in warm water and soap for thirty (30) minutes, dry it with a soft cloth, and replace it.
- Check door gaskets for proper seal after they are replaced.
- Periodically remove the shelves and pilasters from the unit and clean them with mild soap and warm water. To remove the pilasters, first, remove the shelves and shelf brackets. Then, simply lift the pilaster up and out.

## Cleaning the Condenser Coil

- For efficient operation, keep the condenser surface free of dust, dirt, and lint.
- We recommend cleaning the condenser coil at least once per month.

## Condenser Coil Cleaning Instructions:

**A dusty condenser may lead to high energy consumption, less cooling effectiveness, and compressor damage.**

The condenser coil is located at the bottom behind the panel.

1. Disconnect the electrical power from the unit.
2. Remove the front cover and base cover with a screwdriver.
3. Using a soft brush and/or vacuum, remove the dirt, lint, etc. from the finned condenser coil in a vertical direction.
4. Clean the condenser with a commercial condenser coil cleaner, available from any kitchen equipment retailer. Ex. Noble Chemical Tech Line.
5. After cleaning, straighten any bent condenser fins with a fin comb.
6. When finished, be sure to reinstall the front cover and base cover.
7. Reconnect the electrical power to the unit.

# Troubleshooting

| Issue | Possible Cause | Possible Solution |
|---|---|---|
| Compressor is not running. | Fuse blown or circuit breaker tripped. | Replace fuse or reset circuit breaker. |
| | Power cord unplugged. | Plug in power cord. |
| | Thermostat set too high. | Set thermostat to lower temperature. |
| | Cabinet in defrost cycle. | Wait for defrost cycle to finish. |
| Condensing units run for long periods of time. | Excessive amount of warm product placed in cabinet. | Allow adequate time for product to cool down. |
| | Prolonged drawer opening or drawer currently ajar. | Ensure drawers are closed when not in use. Avoid opening drawers for long periods of time. |
| | Dirty condenser coil. | Clean the condenser coil. |
| Cabinet temperature is too warm. | Thermostat is set too high. | Set thermostat to lower temperature. |
| | Excessive amount of warm product placed in cabinet. | Allow adequate time for product to cool down. |
| | Fuse blown or circuit breaker tripped. | Replace fuse or reset circuit breaker. |
| | Dirty condenser coil. | Clean the condenser coil. |
| | Low refrigerant levels. | Contact a service technician to check refrigerant levels. |
| Cabinet has excessive condensation. | Relative humidity is too high. | Relocate cabinet away from doors and windows to an air conditioned area. |
| | Night covers have condensation. | Some condensation is normal. |