Commercial School Milk Cooler
User’s Manual

Commercial School Milk Coolers:
178MC34HC, 178MC49HC, 178MC58HC

Please read the manual thoroughly prior to equipment set-up, operation and maintenance.
Warning

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

PELIGRO - RIESGO 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 FRIGORIGÈNE.

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 LES 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.

ATENCIÓN – 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.
Please read this manual thoroughly prior to equipment set-up, operation and maintenance.

**Inspection**

When the equipment is received, all items should be carefully checked against the bill of landing to insure all crates and cartons have been received. All units should be inspected for concealed damage by uncrating the units immediately. If any damage is found, it should be reported to the carrier at once, and a claim should be filed with the carrier. This equipment has been inspected and tested in the Avantco Refrigeration Facility and has been crated in accordance with transportation rules and guidelines. Manufacturer is not responsible for freight loss or damage.

**Installation**

**GENERAL**

Take care when removing the skid, so that it will not damage the cooler’s finish. Do not tip cabinet to install casters or legs. Insure that the casters or legs are screwed all the way into the base.

**LOCATION**

The self contained refrigeration system located at the bottom of the cabinet requires free air access for proper operation. The back of the cabinet may be positioned against a wall, however, there must be a minimum four inch clearance between the sides and a wall. It is necessary to properly level cooler to provide adequate drainage and efficient functioning of the unit.

**ELECTRICAL**

Check the proposed outlet to be used to insure that the voltage, phase, and current carrying capacity of the circuit from the electrical panel correspond to the requirements of the cabinet. Plug all standard models into a 110 volts A.C.60 cycle outlet. NEVER use an extension cord to power any unit. All wiring between the electrical panel and the unit must be done in accordance with the National Electric Code and all state and local codes. Refer to the Serial Tag for all pertinent electrical information.
General Operation

The milk coolers are cooled entirely by convection as a result of copper coils completely encircling the perimeter of the storage compartment. During the refrigeration process, heat is removed through the evaporator tubing and expelled through the condensing unit. It is important that the flow of air through the side louvers is not restricted in order to ensure the condensing unit operates properly. Under normal operating conditions, any frost that might accumulate on the walls during the “on” cycle of the condensing unit may melt during the “off” cycle. Drains are installed in all milk coolers to accommodate melting frost.

Adjusting the Temperature

Your new refrigerator or freezer is already factory-set to run at optimum temperatures for food safety and should require no adjustments.

Refrigerators are set to cycle between a minimum temperature of 33 degrees Fahrenheit and a maximum temperature of 40 degrees Fahrenheit.

Freezers are set to cycle between a minimum temperature of -5 degrees Fahrenheit and a maximum temperature of 2 degrees Fahrenheit.

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 you want it to run at.
- 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 +7 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.
Running a Manual Defrost Cycle

Units are pre-programmed to run automatic defrost cycles at preset intervals. However, if you would like to run a manual defrost cycle at any time, please follow the steps below:

1. Press the defrost button (snowflake symbol and down arrow) for approximately 3 seconds.
2. Repeat to stop the defrost cycle.

General Maintenance

PERIODIC CLEANING

Beginning with the initial installation, the interior surfaces of the cabinet should be periodically wiped down with a solution of warm water and baking soda. This solution will remove any odors from spillage that has occurred. The exterior of the cabinet should also be cleaned frequently with a commercial grade glass cleaner or with mild soap and water. Never, under any circumstances, use an abrasive cleaner or alkaline solution.

Monthly cleaning of the condenser will aid the heat transfer characteristics of the refrigeration system and increase its efficiency. To accomplish this, remove the louvered panel from the cabinet and use a wire brush to loosen any dirt particles that are attached to the fins. After this is accomplished, use a vacuum cleaner to remove the loosened particles.
## Troubleshooting

### Compressor Will Not Start, **No Hum**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service cord unplugged</td>
<td>Plug in service cord</td>
</tr>
<tr>
<td>Fuse blown or removed</td>
<td>Determine reasons and correct</td>
</tr>
<tr>
<td>Control stuck open</td>
<td>Repair or replace</td>
</tr>
<tr>
<td>Wiring incorrect</td>
<td>Check wiring against the diagram</td>
</tr>
</tbody>
</table>

### Compressor Will Not Start, **Hums but Trips Overload Protector**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improperly wired</td>
<td>Check against the wiring diagram</td>
</tr>
<tr>
<td>Low voltage to unit</td>
<td>Determine the reason and correct</td>
</tr>
<tr>
<td>Starting capacitor defective</td>
<td>Determine the reason and replace</td>
</tr>
<tr>
<td>Relay failing to close</td>
<td>Determine the reason, correct or replace</td>
</tr>
</tbody>
</table>

### Compressor Starts & Runs **but Short Cycles on Overload Protector**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low voltage to unit</td>
<td>Determine the reason and correct</td>
</tr>
<tr>
<td>Overload defective</td>
<td>Check current, replace overload protector</td>
</tr>
<tr>
<td>Excessive head pressure</td>
<td>Check ventilation or restriction in refrigeration system</td>
</tr>
<tr>
<td>Compressor hot-return gas hot</td>
<td>Check refrigeration charge, fix leak if necessary</td>
</tr>
</tbody>
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Warranty Information

Limited Service Warranty - Valid only in the United States

1 Year Parts and Labor Warranty
Unless otherwise stated, Avantco Refrigeration warrants to the original purchaser of new Avantco Refrigeration units (and all parts thereof), that such equipment will be free from defects in material and workmanship for a period of 1 year from the date of delivery.

5 Year Compressor Warranty
In addition to the 1 year parts and labor warranty above, Avantco Refrigeration warrants the compressor on select units to be free of defects in material and workmanship for a period of 5 years from the date of delivery. This additional warranty applies to the following product series:
UBB, UDD, PICL, SCL, MC, JBC, GDC, CFD, CBE, SSPT, APT, APPT, SS, HBB, GF, A-Series, VAC, CP, BC, MC, SSUC, SSWT, GF, DLC
On products without the 5 year compressor warranty, the compressor is covered for 1 year under the standard parts and labor warranty.

What This Warranty Does Not Cover:
Avantco Refrigeration will not warrant coverage for component failure or other damages that arise under the following conditions:

• Failure to install and/or use the unit within proper operating conditions specified by Avantco Refrigeration.
• Failure to properly maintain the unit. This includes, but is not limited to, basic preventative maintenance like cleaning the condenser coil.
• Installation in non-commercial or residential applications.
• Products sold or used outside of the United States.
• Any damage that occurs as a result of negligence or improper handling.
• Overloading or improper loading of the unit in a manner that prevents proper airflow.

Additionally, no claims can be made against this warranty for spoilage of products, loss of sales or profits, or any other consequential damages.

Normal wear type parts, such as light bulbs and gaskets, are not included in warranty coverage.

For Warranty Inquiries or Service:
This warranty is only valid on equipment purchased from an authorized dealer. A list of authorized dealers for your state can be found by going to avantcorefrigeration.com.

• Locate the model number (located on the front of the unit, or inside the door jamb).
• Locate the bold number on the service plate (located on the front of the unit).

Next, call 1-800-678-5517. You must have the model number and service plate number when contacting service technicians.

Failure to contact Avantco Refrigeration prior to obtaining equipment service may void your warranty.