

**INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS**

**FOR**

**REFRIGERATION KOOL-AIR INC.  
DIRECT DRIVE FLUID COOLER**



**JANUARY 2006**

**WARNING: ELECTRICAL POWER MUST BE SWITCHED OFF / DISCONNECTED BEFORE STARTING ANY SERVICE WORK ON THE UNIT.**

## **RECEIVING & INSPECTION**

You have purchased one of the best units available in the market today. It has some very unique features. Congratulations and thank you for using Kool-Air Inc.

A thorough inspection of the fluid cooler and all component parts should be made immediately on delivery and any damage in transit or any missing parts must be reported at once to the carrier. **As consignee, you must make any claim for damage or losses.**

Our shipment is thoroughly inspected before it is handed over to the transport driver.

## **HANDLING**

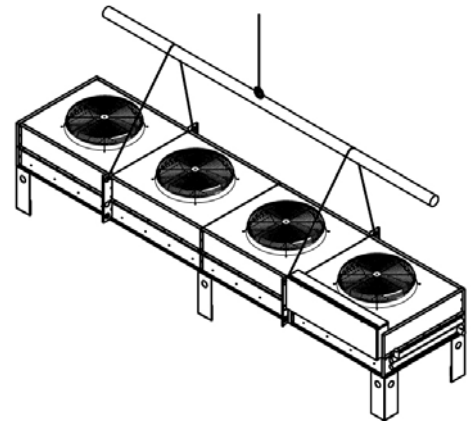
**Please do not use a forklift truck to handle units. Use only chains with hooks and spread bars to lift units.**

When a unit is shipped on its side, two or three hangers are installed. Use them to unload the unit from the truck. A lift truck can be used with the wood base in that position only to lower the unit on the ground.

Two other hangers, four, six or eight legs (depending on the size of the unit) and the required hardware are supplied attached to the cabinet.

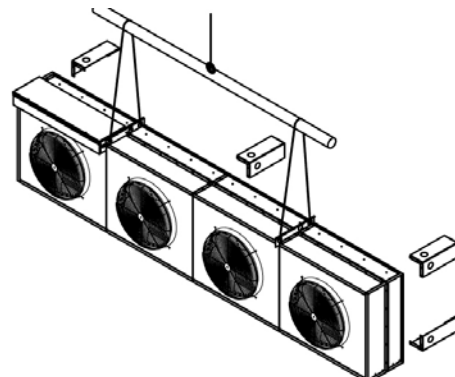
### **Lifting method 1:**

- Install all the legs on the same side as hangers.
- Gently lower the unit on those legs.
- Install hangers on opposite side.
- Raise the other side and install other legs.
- Install chains and spread bars to raise the unit to its final position.



### **Lifting method 2:**

- Gently lower the unit on a flat surface.
- Install hangers on opposite side.
- Install chains and spread bars to raise the unit.
- Lift the unit and install all the legs.
- Lift the unit to its final position.



## **LOCATION**

Fluid cooler are installed outside on the roof or on the ground. If the unit is installed on the ground it must be fenced to prevent possible damage.

Check loading capacity of the roof, the ceiling or the floor before installation.

When selecting a location for the fluid cooler, consideration should be given to provide enough space for adequate air circulation and to avoid air recirculation. It should have convenient and safe accessibility for maintenance. It must also comply with local building codes.

If a unit is to be placed close to a wall, the minimum distance between the wall and the unit must be at least equal to the width of the unit. If two units are to be placed side by side, the minimum distance between the two units must be at least equal to the width of the wider unit.

Units are usually placed on a steel frame on the roof. They must be bolted down using all the holes provided on the supplied legs. The frame must be straight and level for proper operation of the unit.

## **WIRING**

All wiring must be done in accordance with national and local Codes. Check the nameplate with the current characteristics to be used for wiring the unit. Internal wiring connections of the fan motors, optional controls and contactors have been completed at the factory.

All wiring connections terminate on a single terminal block in the control panel. The terminals are clearly labelled and correspond to the wiring diagram supplied. The unit must be grounded. The disconnect switch of the unit must be provided.

## **FLUID PIPING**

All fluid piping must be installed in accordance with applicable local and national codes.

## **OPERATION**

For cooling system to function properly, the fluid temperature must be maintained within certain limits. Control is accomplished by cycling fans in response to fluid temperature. Optional fan cycling controls are located in the control box.

## **FAN MOTORS**

**Please disconnect all power before servicing.** The fan motors are permanently lubricated for service free operation. The motor may restart on automatic thermal overload protection. Motors are readily serviced by removing fan guards and fans. If a motor is inoperative or it cycles on thermal protection, check supply voltage at the motor leads. Fan motors may cycle on thermal protection if the coil is blocked.

## **CLEANING & MAINTENANCE**

After one day of operation, check for any vibrations that might have developed in the unit. It is recommended that the unit be inspected periodically for dirt accumulation. Grease and dust should be removed from the fans and fan guards.

Periodical cleaning of the finned surface can be done by washing down dust with warm water spray and a mild detergent. **Do not use alkaline or acidic solution as it will attack the coil material.** The inner face of the coil may be cleaned by the access panels on the side of the unit or by removing the fan guards.

### **HEAD OFFICE:**

**REFRIGERATION KOOL-AIR INC.**

**Quebec Canada**

**Tél: (450) 632-5775**

**Tollfree: 1-866-632-5775**

**Fax: (450) 632-7412**

**Due to Kool-Air policies to continuously improve the quality of its products, specifications are subject to change without notice.**