REMOTE VERTICAL DISCHARGE CONDENSER

Installation Instructions

Ice Machine	Condenser	Line Set
ER0490N	AC-0495A	RT-**-12
ED0492N	AC-0495A	RT-**-12
EY0494N	AC-0495A	RT-**-12
ER0690N	AC-0695A	RT-**-12
ED0692N	AC-0695A	RT-**-12
EY0694N	AC-0695A	RT-**-12
ER1190N	AC-1195A	RT-**-12
ED1192N	AC-1195A	RT-**-12
EY1194N	AC-1195A	RT-**-12
GR1290N	AC-1295A	RL-**-502
GD1292N	AC-1295A	RL-**-502
GY1294N	AC-1295A	RL-**-502
GR1790N	AC-1795A	RL-**-502
GD1792N	AC-1795A	RL-**-502
GY1794N	AC-1795A	RL-**-502

General Information

The above listed ice machines are used in conjunction with their corresponding remote air condenser and their line set model number. The ** in the line set model number represents line length. Line sets are available in 20', 35', and 50' lengths.

Ice Machine Set-up

Follow the standard installation specifications supplied with the ice machine but do not place the ice machine into its final position until the refrigerant lines and electrical lines to the remote air condenser are connected.

Remote Air Condenser Set-up

1. Assemble two legs to each of the two mounting tracks. This assembly provides for three separate height adjustments. The standard 12" and 16" height and a 20" height are to be used in installations where heavy snow or debris may collect at base of condenser causing air flow restrictions (see Figure 1).
2. Locate the remote condenser in a well-ventilated area on the roof. Consult the Manitowoc office for other applications.
3. Using the six mounting holes provided, secure the remote condenser to the roof. Seal with tar or pitch to prevent entrance of moisture.

Refrigerant Lines

1. Each condenser is connected with two precharged lines. The precharged lines are ordered separately from the condenser(s) to suit each individual application.
2. Remove the tubing from the carton. Carefully unwind the coil so the tubing doesn't become kinked.
3. The refrigerant fittings on the ice machine and remote condenser are to be oiled before connecting - use refrigeration oil only.
4. Carefully thread, by hand, the female hose fittings to the male fitting on the ice machine and remote condenser. Using the proper size wrench, tighten the couplings until you feel them bottom out. Then add an additional 1/4 turn to insure proper seal. If a torque wrench is used, follow these torque values:
   R-12 Liquid Line - 10-12 ft. lb.
   R-12 Discharge Line - 35-45 ft. lb.
   R-502 Liquid Line - 35-45 ft. lb.
   R-502 Discharge Line - 50-65 ft. lb.

   Once the refrigeration lines are connected, the seal is broken in the fittings, and if removed from the ice machine or remote condenser, the refrigerant charge in the ice machine and condenser will be depleted.

Remote Condenser Electrical Hook-up

1. Connect electrical supply from the ice machine to the condenser, per the attached ice machine/condenser sketch and the wiring diagram. Ground through the conduit or separate ground wire.
2. Follow all local and national electrical codes.

Start-up

The start-up procedures for the remote ice machines are the same as for the standard ice machines. Follow the installation specifications that came with the unit with these exceptions:

1. Before start-up, open (backseat) the receiver valve(s).
2. After the ice machine is running, check the remote air condenser to verify that the fan(s) is running. The fan will run during harvest on the G-0600 and G-0800 series. The fan will be off during harvest on all other models.

TYPICAL INSTALLATION FOR G-1790N SERIES ICE MACHINE WITH AC1795A CONDENSER & EO490N, E0690N, E1190N, AND G1290N SERIES ICE MACHINES WITH AC0495A, AC0695A, AC1195A, OR AC1295A REMOTE CONDENSERS

UNDERWRITERS LABORATORIES FILE NO. SA4027
NATIONAL SANITATION FOUNDATION FILE NO. 595
CANADIAN STANDARD ASSOCIATION FILE NO. LR 25608

Electrical Disconnect
(by customer)

Bore 2 1/2" diameter hole in roof or wall for tubing. Seal with tar or pitch and slope to prevent entrance of moisture.

NOTES:
1. All wiring and plumbing must comply with local and national codes.
2. See serial plate on ice machine and remote condenser for electrical information.

EXCESS TUBING
If the line set used is longer than required, the excess tubing must be cut out at the time of installation. The tubing should be cut prior to connection to the condenser or unit, so the system's refrigerant charge is not lost. To remove excess tubing, use the following procedure:

A. Cut armaflex insulation.
B. Blow vapor-holding charge in tubing.
C. Cut out excess tubing using a tubing cutter.
D. Deburr the ends of the tubing. Be sure no copper chips are in the tubing - blow out, if there is a doubt.
E. Using a coupling joint, braze tubing back together.
F. Pull a good vacuum on both lines.
G. Charge each tube with 2 to 3 ounces of vapor, using the refrigerant type listed on the unit's serial plate.
H. Leak check the weld joints and slide insulation back. Cut away excess, if needed.