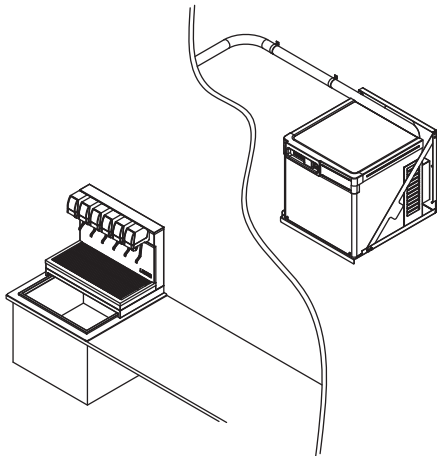
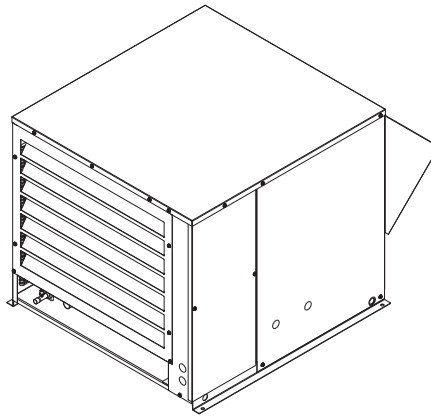
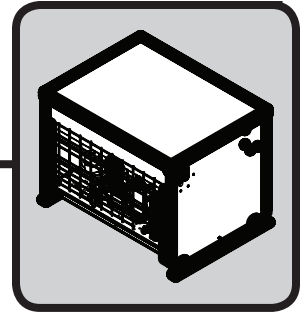


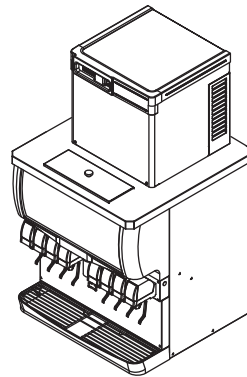
Horizon Elite™ Ice Machine Installation Instructions for Remote Condensing Unit

HC_1810R/N, HM_1810R/N
HC_2110R/N, HM_2110R/N

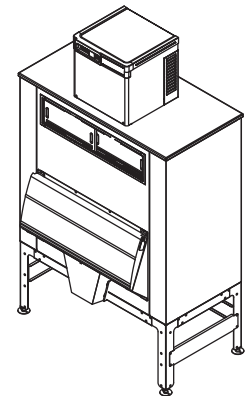
Order parts online
www.follettice.com



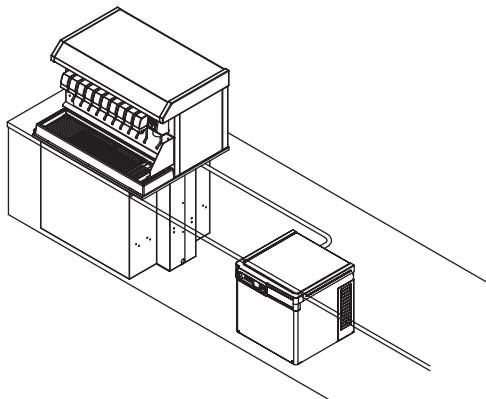
Drop-in Remote Condensing
RIDE® remote ice delivery equipment



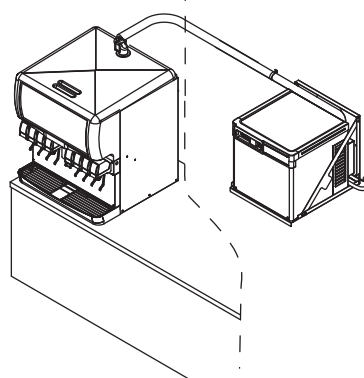
Harmony Remote Condensing
Top Mount



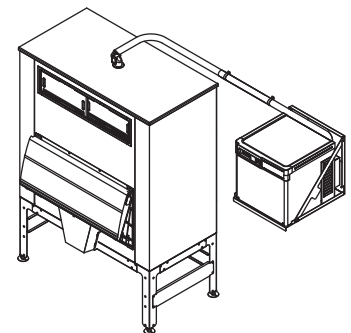
Bin Remote Condensing
Top Mount



Vision™ Remote Condensing
RIDE remote ice delivery equipment



Harmony™ Remote Condensing
RIDE remote ice delivery equipment



Bin Remote Condensing
RIDE remote ice delivery equipment

Condensing Unit Shipping Weight

Model	Horizon 1810	Horizon 2110
Single-phase	305 lb (1139 kg)	305 lb (1139 kg)
3-phase	305 lb (1139 kg)	305 lb (1139 kg)

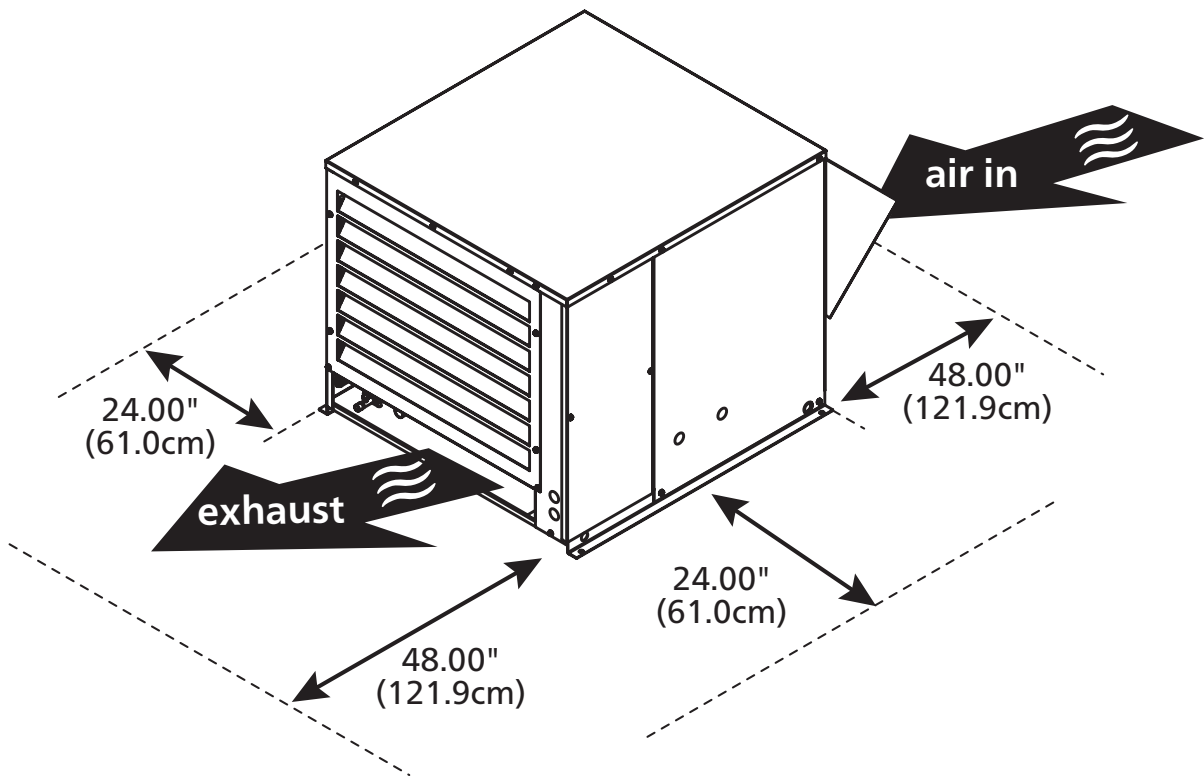
Prior to installation, carefully unpack and inspect the contents of your condensing unit!

Site preparation

1

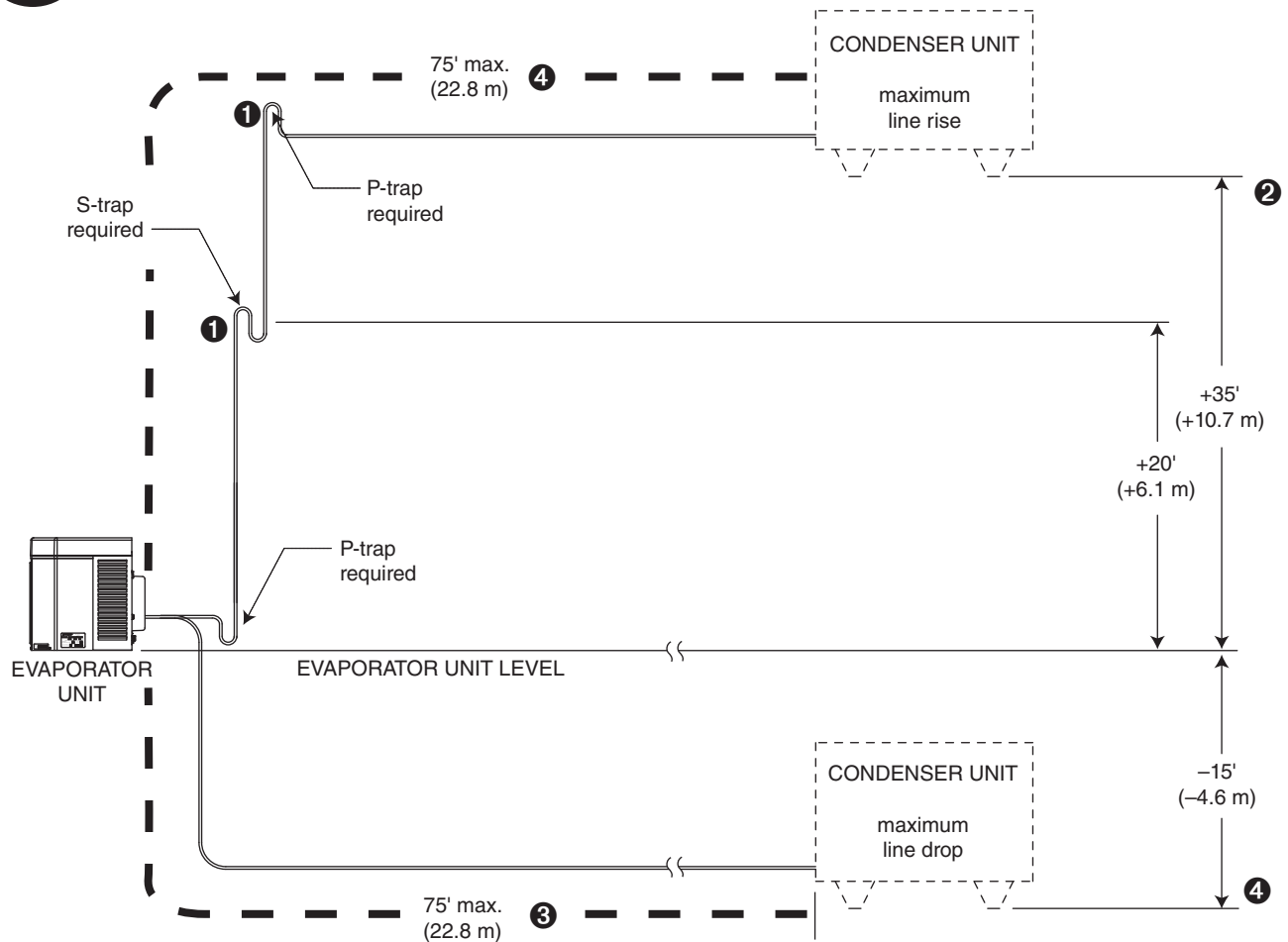
To ensure proper performance, ease of service and warranty coverage, it is critical that you follow the requirements detailed in this manual. If you cannot meet these requirements or have questions, call our technical service group at 877.612.5086 for installation support.

1.1 Condenser Unit Clearances



- Position condenser unit as shown above, with clearances noted above

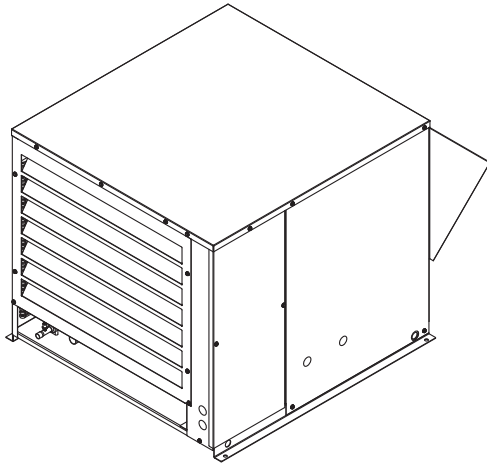
1.2 Condenser installation specifications



Site layout:

- Outdoor ambient temperature range: -20 F to 120 F (-29 C to 49 C)
- Installation with condenser unit elevations above 20' (6.1 m) require an S-trap at the midpoint of the rise and a P-trap at the top and bottom of the rise (1)
- Maximum line rise must not exceed 35' (10.7 m) (2)
- Maximum line set length must not exceed 75' (22.8 m) (3)
- Maximum line drop must not exceed 15' (4.6 m) (4)

2.1 Install condensing unit



- Level unit
- Securely attach base of unit using holes found in base plate
- Required rack system capacity at 0 F (−18 C) evaporator (EPR supplied by installer).
1810N: 15,700 Btu/hr (3956 kcal/hr)
2110N: 18,200 Btu/hr (4586 kcal/hr)

2.2 Electrical requirements

Condensing unit

	1810 Single-Phase	1810 3-Phase	2110 Single-Phase	2110 3-Phase
Electrical	208-230V, 60Hz			
Max Circuit HVACR breaker size	45A	25A	45A	30A
Min Circuit Ampacity	26.2A	15.7A	27.1A	19.9A

- Refer to wiring schematic located in condenser unit electrical box



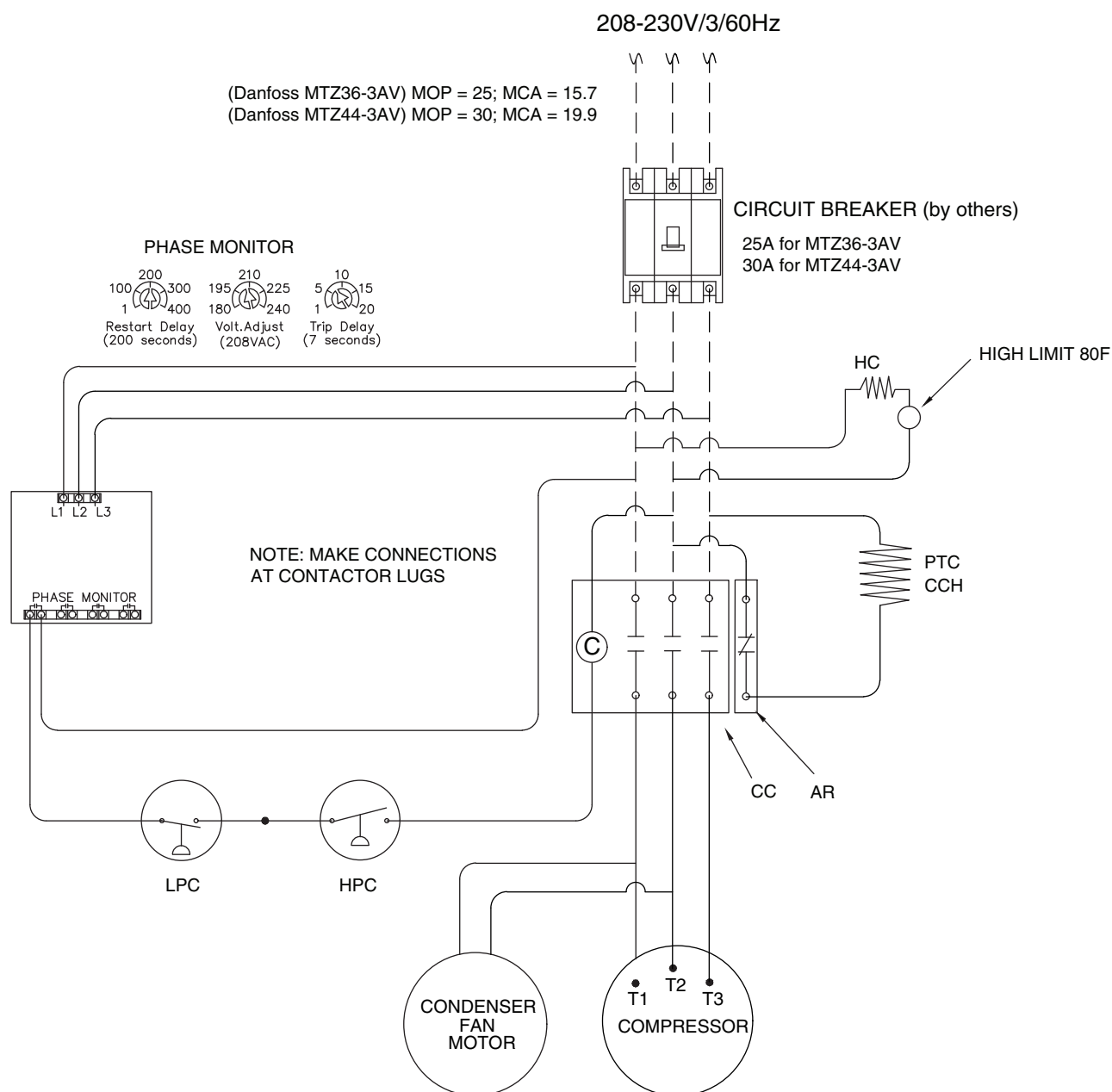
CAUTION

- Electrical disconnects required within 10' (3 m) for all hard wired connections
- Install in accordance with NEC and local electrical codes

Single-phase condensing unit wiring diagram

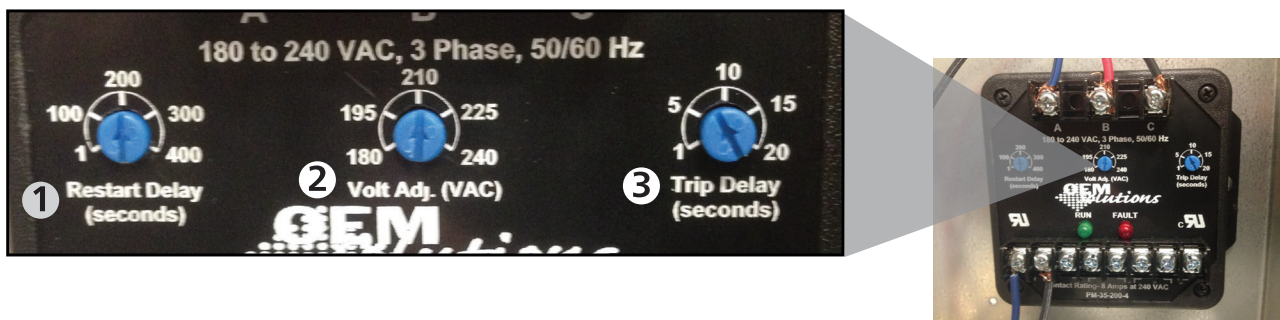


3-phase condensing unit wiring diagram



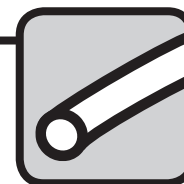
2.4

Phase monitor adjustments (if necessary)



1. Use a meter at the phase monitor to ensure there is voltage across all three phases and note the voltage value.
2. The Restart Delay **①** should be set to 200 (seconds).
3. The Voltage Adjustment (VAC) **②** should be set to match the voltage value from Step 1.
3. The Trip Delay **③** should be set to 7 (seconds).

PLEASE NOTE THAT ANY TIME POWER IS APPLIED TO THE CONDENSING UNIT, OR THE UNIT COMES OUT OF A FAULT STATE, IT WILL TAKE APPROXIMATELY 200 SECONDS FOR THE UNIT TO POWER ON.



3.1 Refrigeration line installation: 7/8" suction / 3/8" liquid line (1810, 2110)

CAUTION

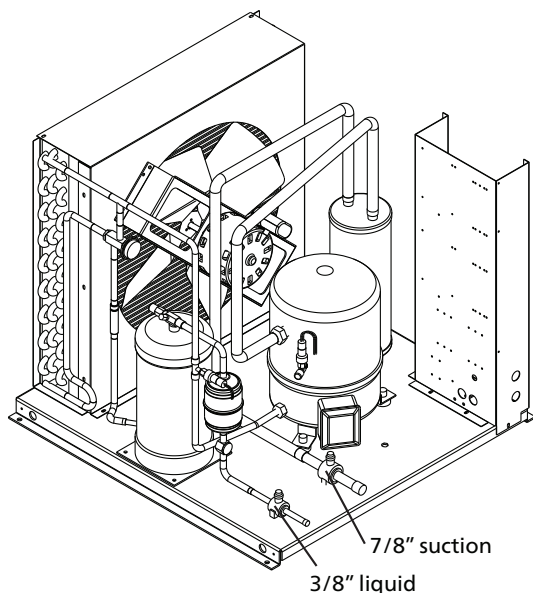
- The installer of the refrigeration line set must be USA Government Environmental Protection Agency (EPA) certified in proper refrigeration handling and service procedures
- A qualified person must perform all roof or wall penetration
- Do not form unwanted traps in refrigeration lines. A service loop is not considered an oil trap.
- Never coil excess refrigeration tubing
- The compressor oil rapidly absorbs moisture. Minimize the exposure of the refrigeration system by not releasing the condenser unit or evaporator unit holding charge until all line connections are finished and the system is ready for evacuation.

WARNING

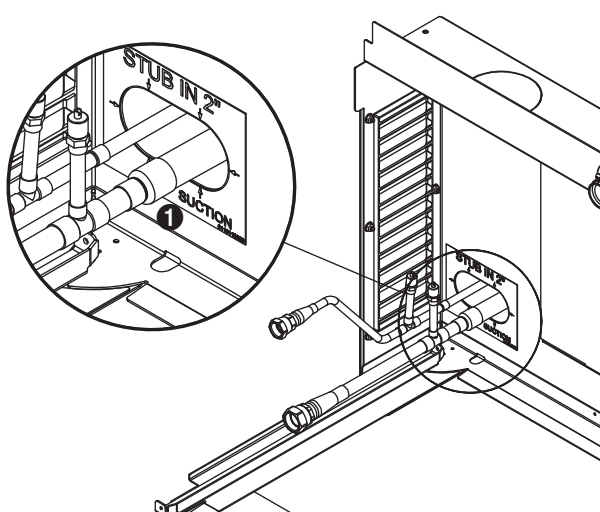
- This unit contains an R404A holding charge

1. Make and connect line set run from the condensing unit to the evaporator unit with all specifications found in the installation specifications section. **DO NOT ATTACH QUICK DISCONNECT CONNECTIONS TO THE EVAPORATOR!** Do not overheat shut off valves on the condenser unit or quick disconnects on evaporator unit.

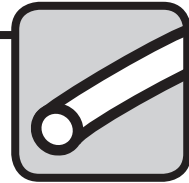
Note: Insulate entire suction line (not the liquid line) including shut off valves to prevent condensation.



- Braze the line set to the suction and liquid lines. Run line set to the docking station and stub in 2"

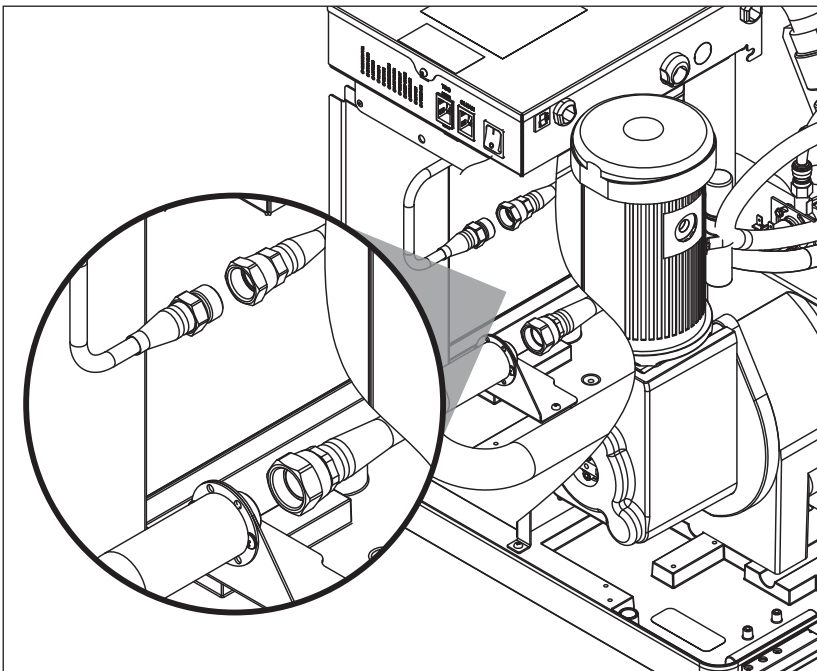


- Braze supplied quick-connect lines onto stub-ins **1**. **DO NOT ATTACH QUICK DISCONNECTS TO EVAPORATOR!**



3.2

2. Leak check field joints.
3. Evacuate line set via the condensing unit service valves.
5. Open the liquid line service valve and suction line service valve on the condensing unit.
6. Connect the self-sealing liquid and suction line quick disconnects to the evaporator.



7. Open the liquid line valve on the receiver, then the suction line valve on the compressor unit.
8. Liquid charge unit through liquid line shut off valve on the evaporator unit or receiver valve on the condensing unit.

R404A ice machine charge specifications for 1810/2110 models with line runs up to 75 ft. (up to 22.8 m):

Ice machine evaporator holding charge	0.5 lbs (0.23 kg)
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Condensing unit holding charge	0.5 lbs (0.23 kg)
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<i>Charge at installation</i>	14 lbs (6.35 kg)
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Total charge: 14.5 lbs (6.57 kg)

9. Isolate the refrigerant tank from high pressure side on the system.
10. Turn on power to condensing unit and evaporator unit.
11. Complete system charge through low pressure side.

NOTICE

Ice machine MUST be cleaned and sanitized prior to operation!

Consult Operation and Service Manual provided with ice machine for cleaning and sanitizing instructions.



4.1 Verify operation

- Turn dispenser power ON if applicable
- Check current draw of compressor to verify correct electrical operation.
- Put a piece of ice on bin thermostat or hold a cup under the shuttle actuator on the bin/dispenser to verify that the evaporator unit shuts OFF; condensing unit pumps down and shuts off.
- After shut off, restart the ice machine.

Horizon Condenser Unit Compressor Amperage		
Single-Phase		
Model Number	Condensing Unit	Running amps (+/- 10%)
1810R 01146208	MTZ36JG1AVE	19.3
2110R 01146224	MTZ44JG1AVE	20.0
3-Phase		
Model Number	Condensing Unit	Running amps (+/- 10%)
1810R 01146216	MTZ36JG3AVE	10.9
2110R 01146232	MTZ44JG3AVE	14.2

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