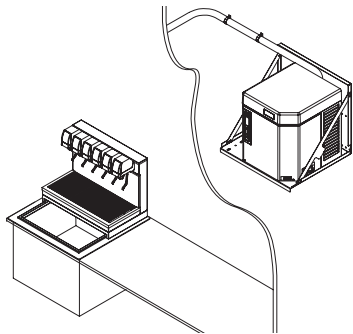
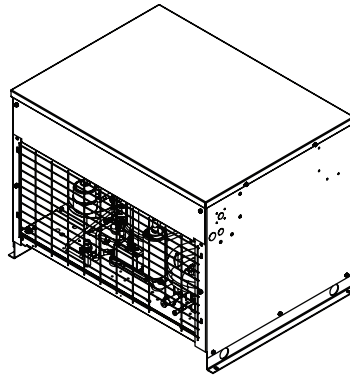
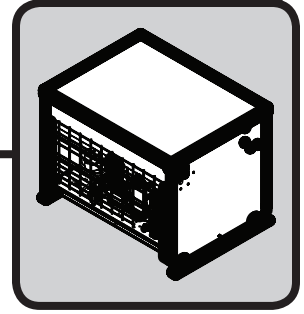


Horizon™ Ice Machine Installation Instructions for Remote Condensing Unit

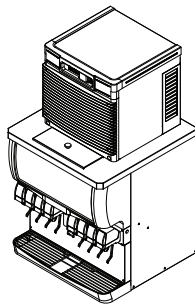
HCD700R
HCD/HMD/HCF/HMF1000R __ __
HCD/HMD/HCF/HMF1400R __ __
HCD/HMD/HCF/HMF1650R __ __

(See model number configurator on page 2 for details.)

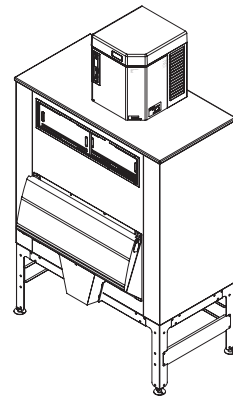
Order parts online
www.follettice.com



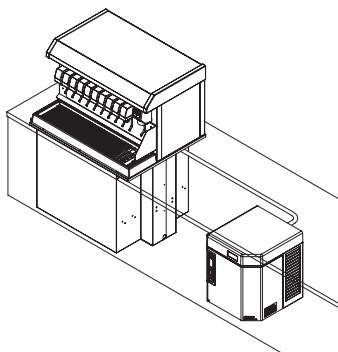
Drop-in Remote Condensing
RIDE® remote ice delivery equipment



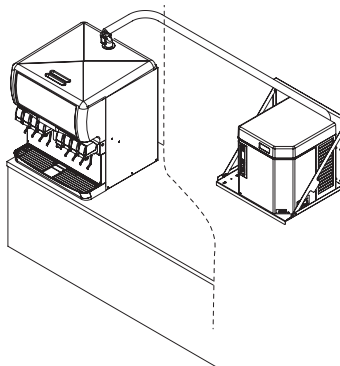
Harmony Remote Condensing
Top Mount



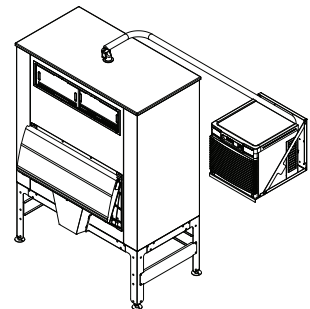
Bin Remote Condensing
Top Mount



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 1000	Horizon 1400	Horizon 1650
Single-phase	265 lb (102 kg)	330 lb (150 kg)	390 lb (177 kg)
3-phase	320 (145 kg)	320 (145 kg)	340 lb (154 kg)

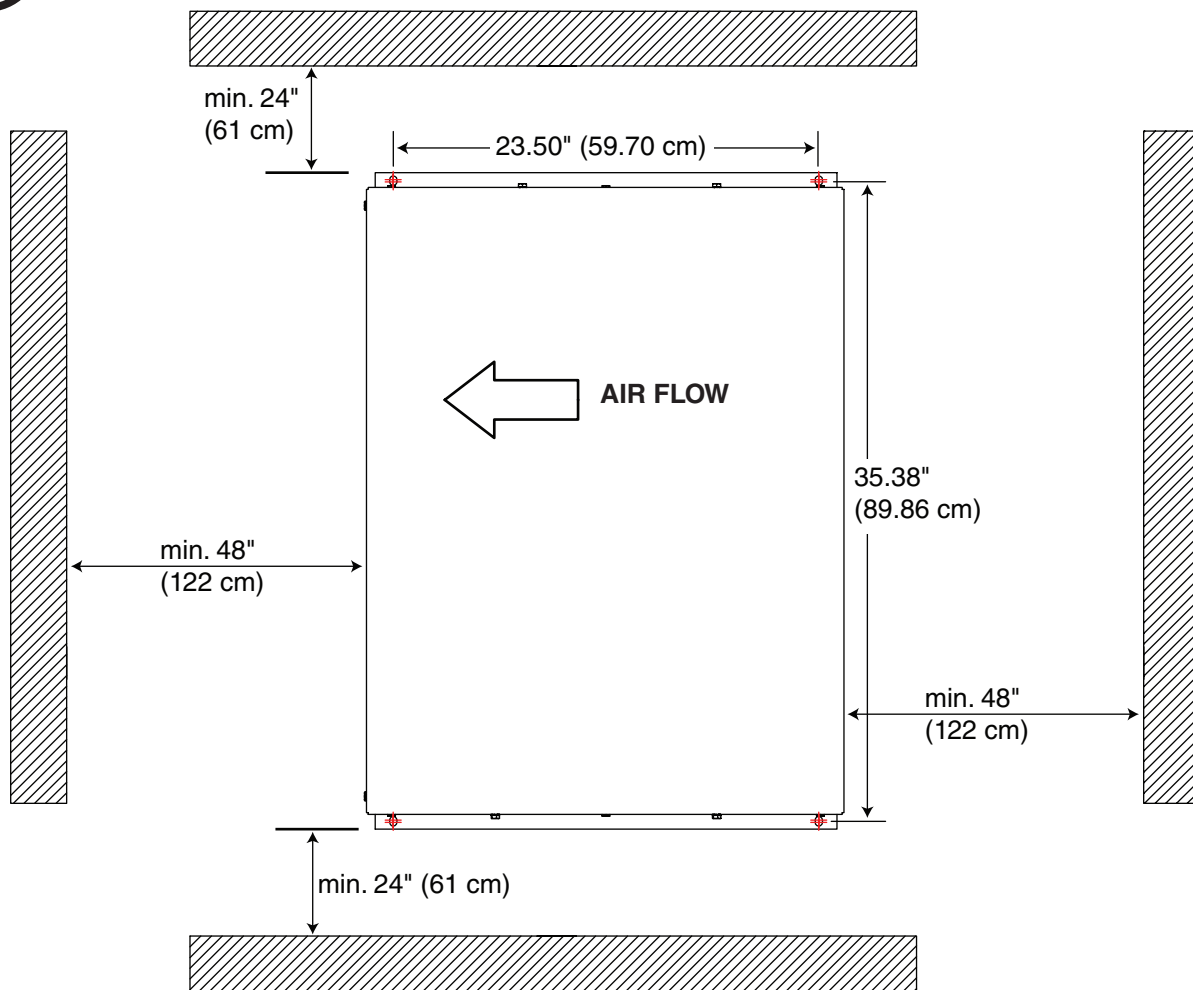
Prior to installation, carefully unpack and inspect the contents of your condensing unit!

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.

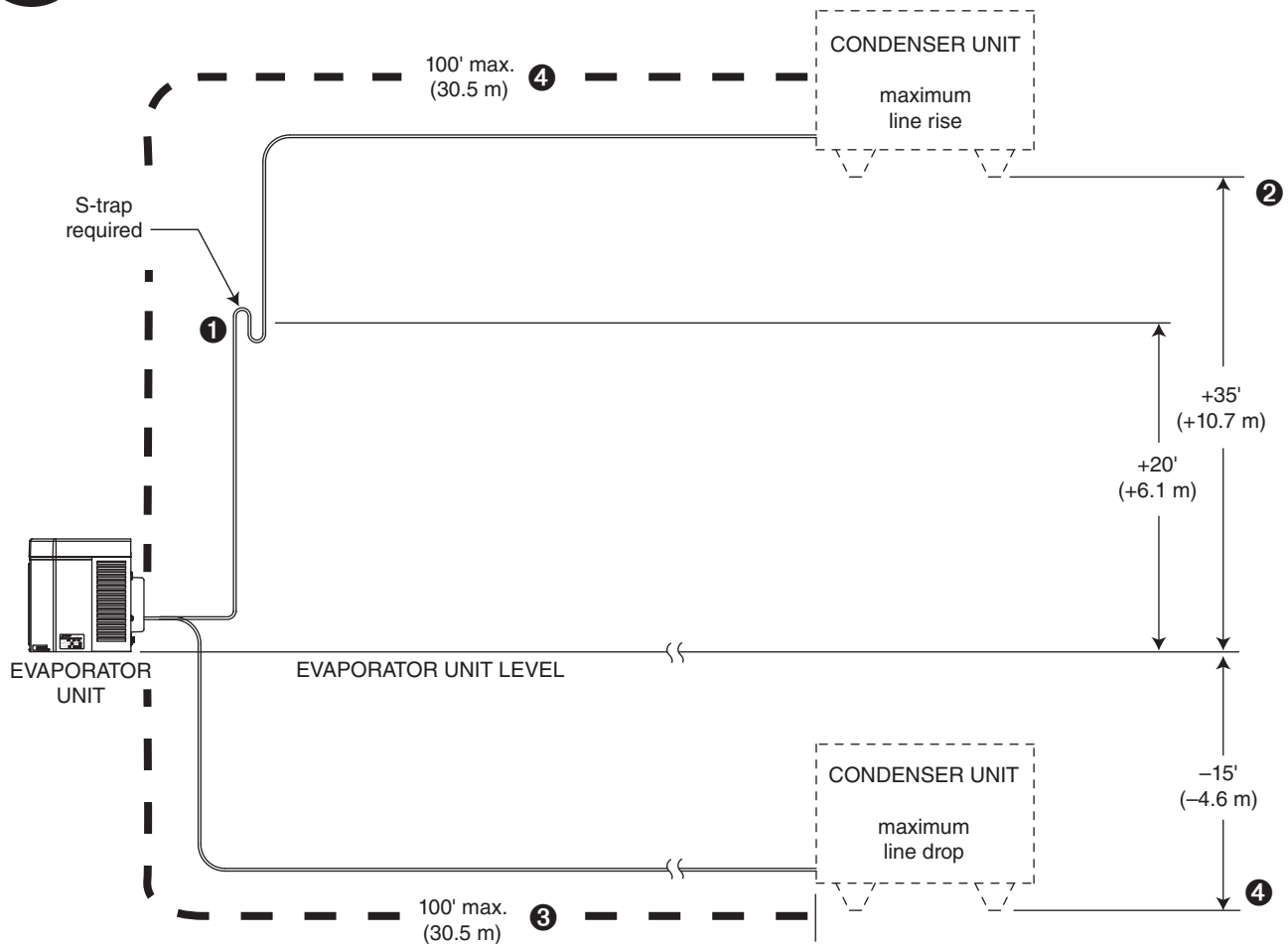
1.1 Condenser Unit Clearances



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

1.2

Condenser installation specifications



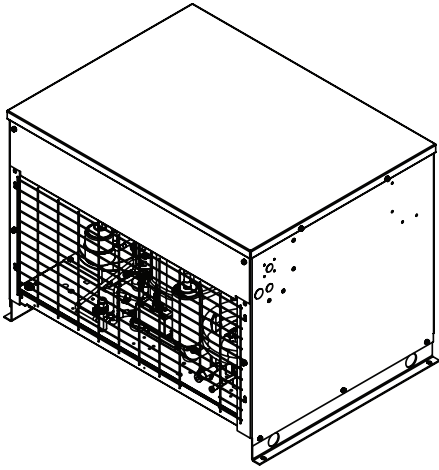
Site layout:

- 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 ①
- Maximum line rise must not exceed 35' (10.7 m) ②
- Maximum line set length must not exceed 100' (30.5 m) ③
- Maximum line drop must not exceed 15' (4.6 m) ④

Note: 1000/1400/1650 units only:

HCD1000/1400/1650 condensing units contain a liquid to suction line heat exchanger. To maintain optimum liquid refrigerant sub-cooling from the heat exchanger, the entire liquid line should be insulated separately from the suction line.

2.1 Install condensing unit



- Level unit
- Securely attach base of unit using holes found in base plate

2.2 Electrical requirements

Horizon Remote Single-Phase

- 208-230/60/1
- 700 - 15A circuit
- 1000 - 15A circuit
- 1400 - 30A circuit
- 1650 - 50A circuit

Horizon Remote 3-Phase

- 208-230/60/3
- 1000 - 15A circuit
- 1400 - 25A circuit
- 1650 - 35A circuit

- 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

2.3

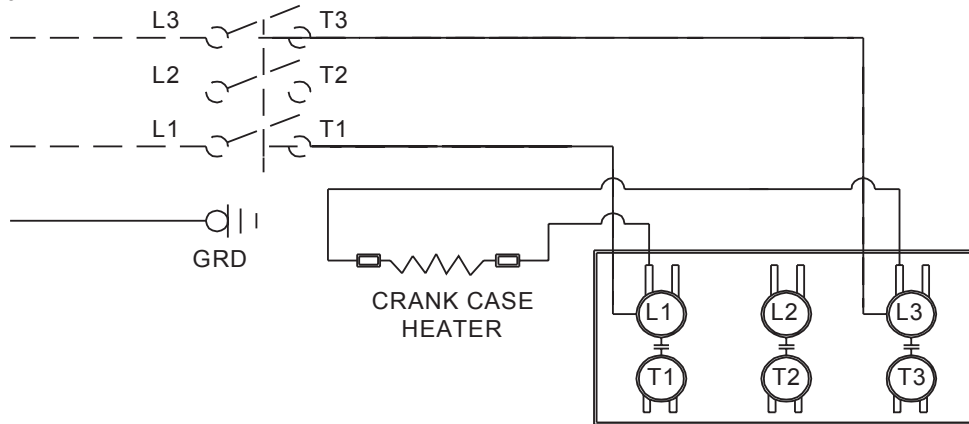
Electrical connections at contactor

1-Phase

POWER SUPPLY
230-60-1

ELECTRICAL
DISCONNECT

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

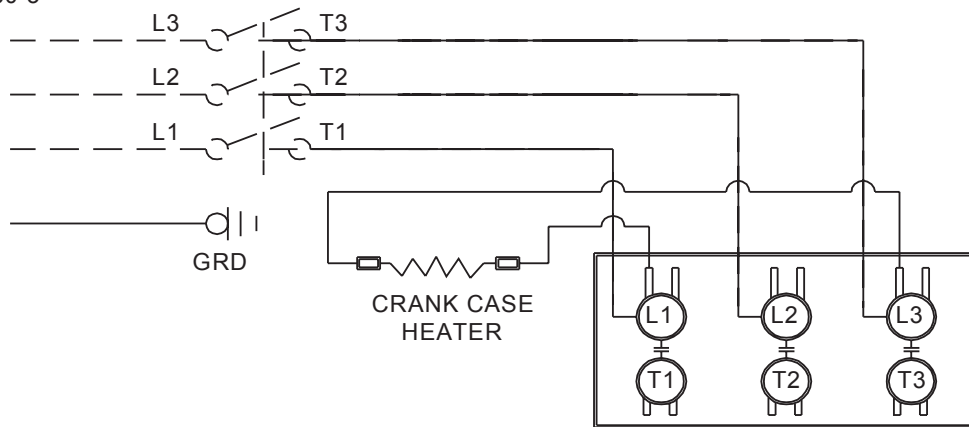


3-Phase

POWER SUPPLY
230-60-3

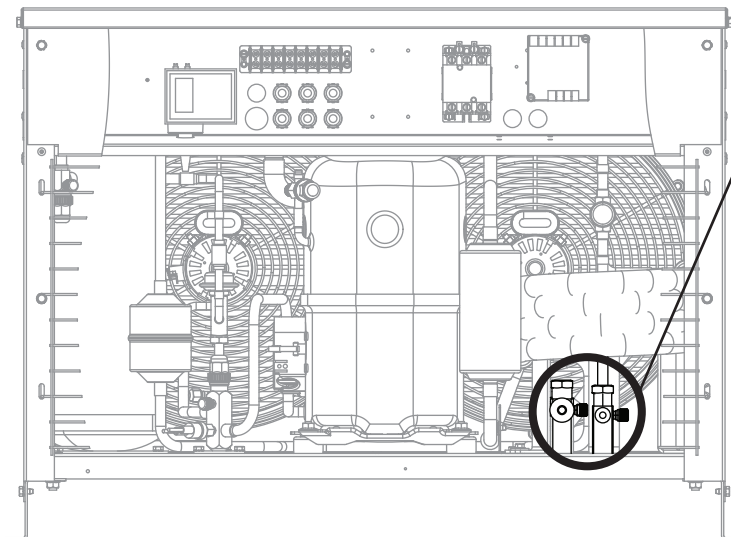
ELECTRICAL
DISCONNECT

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



2.4

Condensing unit refrigeration line-set connection point



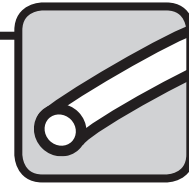
700/1000/1400:

5/8" suction
3/8" liquid

1650:

7/8" suction
1/2" liquid*

* For 1650 units only, the liquid line service valve outlet port requires a 1/2" to 3/8" reducer.



3.1

Refrigeration line installation: 7/8" suction / 3/8" liquid line (1650) 5/8" suction / 3/8" liquid line (700, 1000, 1400)

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.
- HCD1000/1400/1650 condensing units contain a liquid to suction line heat exchanger. To maintain optimum liquid refrigerant sub-cooling from the heat exchanger, the entire liquid line should be insulated separately from the suction line..

WARNING

- This unit contains an R404A holding charge

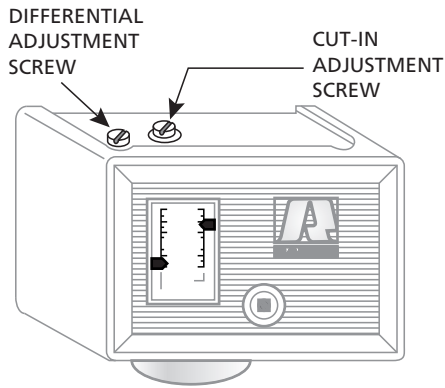
1. Make and connect line set run from the condensing unit to the evaporator unit with all specifications found in the installation specifications section. Do not overheat shut off valves on the condenser unit or evaporator unit.
2. Leak check field joints via the evaporator unit service valves.
3. Evacuate line set via the evaporator unit service valves.
4. Determine required charge size based on the model and line length.

R404A Ice Machine Charge Specifications				
Line Run	Charge 700R	Charge 1000R	Charge 1400R	Charge 1650R
0 - 50' (0 - 15.2 m)	8 lb (4.9 kg)	8 lb (4.9 kg)	11 lb (4.9 kg)	13 lb (5.9 kg)
50 - 75' (15.2 - 22.9 m)	9 lb (5.4 kg)	9 lb (5.4 kg)	12 lb (5.4 kg)	14 lb (6.4 kg)
75 - 100' (22.9 - 30.5 m)	10 lb (5.9 kg)	10 lb (5.9 kg)	13 lb (5.9 kg)	15 lb (6.8 kg)
100' + (30.5 m+)	not recommended – consult factory			

5. Open the liquid line service valve and suction line service valve on the evaporator unit and condenser unit.
6. Open the liquid line valve on the receiver, then the suction line valve on the compressor unit.
7. Liquid charge unit through liquid line shut off valve on the evaporator unit or receiver valve on the condensing unit.
8. Isolate the refrigerant tank from high pressure side on the system.
9. Turn on power to condensing unit and evaporator unit.
10. Complete system charge through low pressure side.
11. Insulate entire suction line including shut off valves to prevent condensation.



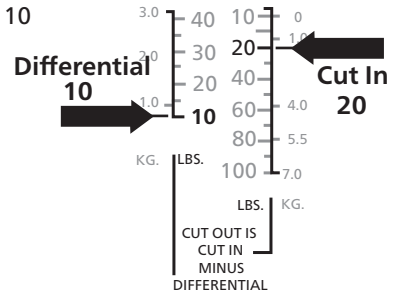
4.1 Set low-pressure switch



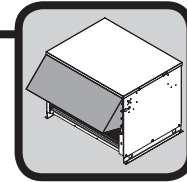
- 1) Adjust the top LEFT screw until the pointer is set to 10 (the differential).
- 2) Adjust the top RIGHT screw until the pointer is set to 20 (the cut-in).

EXAMPLE

$$\text{Cut In } 20 - \text{Differential } 10 = \text{Cut Out } 10$$



Hail hood

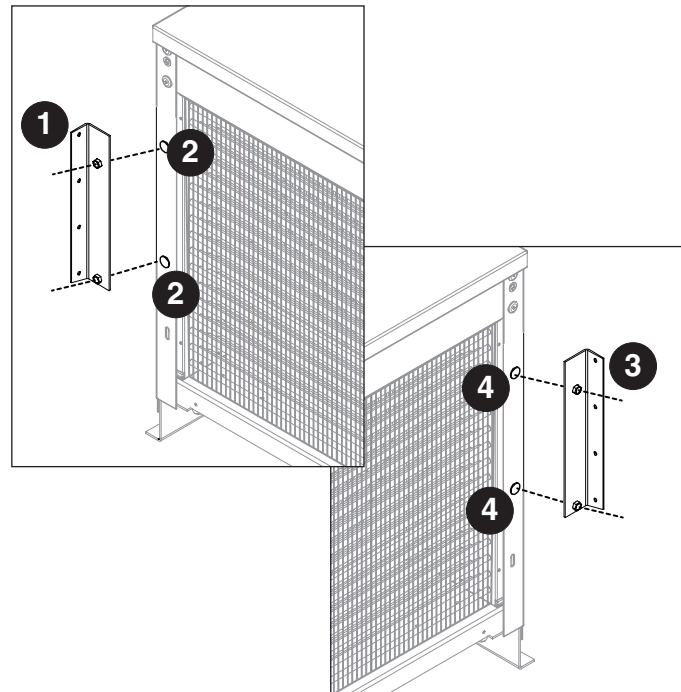


5.1 Install hail hood

Please remove the condenser enclosure top to access the following parts:

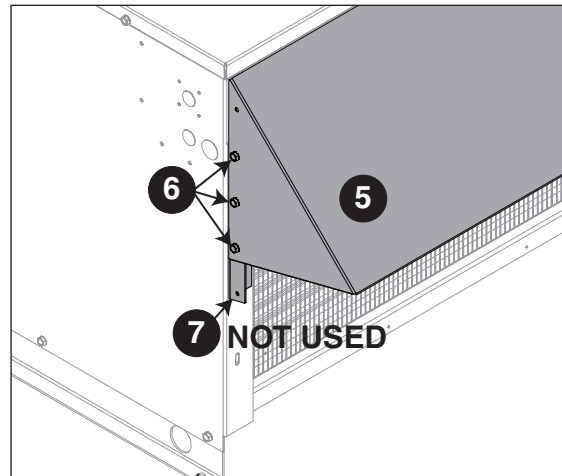
- Left and right brackets (not interchangeable)
- Hail hood
- 1/4 x 20 x 1/2 hex head screw (10)

1. Locate the left bracket (1) and install using two supplied screws (2).
2. Locate the right bracket (3) and install using two supplied screws (4).



3. Install hail hood (5) to brackets using the remaining six screws (6).

Note: The bottom hole in the bracket is *not* used when mounting the hail hood (7).



Start up and test

6

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.



6.1 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%)
700R	AKA9462ZXD	6.8
1000R 00168054	AJA7490ZXDHN	7.4
1400R 00178640	AWA9517ZXNHN	14.7
1650R 00973925	AVA9522ZXNHN	22.6
3-Phase		
Model Number	Condensing Unit	Running amps (+/- 10%)
1000R 00990200	AWA9490ZXTHN	4.7
1400R 00990218	AWA9517ZXTHN	7.3
1650R 00990226	AVA9522ZXTHN	10.3

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