



Service Bulletin

Subject: UP0140 Technical Specifications

AIR-COOLED MODELS

GENERAL SPECIFICATIONS			
Operating Temperatures	Minimum 50°F (10°C) Maximum 100°F (38°C)		
Refrigerant Charge (R-290)	4.9 oz (140 g)		
Ice Making Water Inlet	Connection Size - 3/8" FPT (Female Pipe Thread)	Water Temperature - Minimum 40°F (4.4°C) Maximum 90°F (32°C)	Water Pressure - Minimum 20 psig (1.3 bar) Maximum 80 psig (5.5 bar)
Ice Making Water Drain	Connection Size - 1/2" FPT (Female Pipe Thread)		
Potable Water	17 gallons per 100 lbs of ice 64.35 liters per 45.5 kg of ice		
Electrical	115V/60 Hz/1 Ph	230V/50 Hz/1 Ph	Energy Usage Kwh / 100 lbs 7.25 Kwh
	Min Circuit Amps - 5.0 Max Fuse Size - 15 amp	Min Circuit Amps - 2.5 Max Fuse Size - 15 amp	
Compressor Nominal Rating	0.33 HP		
Heat of Rejection	Air Conditioning 2,500 BTU/hr (630 kcal/hr)	Peak 2,900 BTU/hr (731 kcal/hr)	
Fan Cycle Control	Cut-in - 200 psig (14 bar)	Cut-out - 150 psig (10 bar)	
High Pressure Settings	Cut-in - 250 psig (17 bar)	Cut-out - 350 psig (24 bar)	
Dimensions	Height	Width	Depth
	38.5 in (980 mm)	26.0 in (660 mm)	28.5 in (725 mm)
Clearances	Top	Side	Back
	5.0 in (130 mm)	5.0 in (130 mm)	5.0 in (130 mm)

Self Contained Air-cooled Ice Machines

Cycle Times

Freeze Time + Harvest Time = Total Cycle Time

Air Temp. Entering Condenser °F/°C	Freeze Time (Minutes)			Harvest Time
	Water Temperature			
	50°F 10°C	70°F 21°C	90°F 32°C	
70°F 21°C	10.2-11.7	12.3-13.7	13.0-14.8	1.0-2.5
80°F 27°C	11.2-12.9	13.0-14.9	14.5-16.5	
90°F 32°C	11.8-13.7	14.5-16.5	17.5-20.0	
100°F 38°C	14.6-16.5	17.6-20.0	17.5-21.5	
110°F 43°C	16.2-18.5	19.9-22.4	20.3-23.0	
Cycle times and pressures vary with operating condition. Production and cycle times are for dice cube - Half dice cube cycle times can be 2 - 3 minutes faster, depending on water and ambient temperature				

24 Hour Ice Production

Air Temp. Entering Condenser °F/°C	Water Temperature		
	50°F 10°C	70°F 21°C	90°F 32°C
70°F 21°C	130 lbs 59 kgs	110 lbs 50 kgs	105 lbs 48 kgs
80°F 27°C	120 lbs 54 kgs	105 lbs 48 kgs	95 lbs 43 kgs
90°F 32°C	115 lbs 52 kgs	95 lbs 43 kgs	85 lbs 39 kgs
100°F 38°C	95 lbs 43 kgs	85 lbs 39 kgs	80 lbs 36 kgs
110°F 43°C	85 lbs 39 kgs	80 lbs 36 kgs	70 lbs 32 kgs
Ice slab weight of one harvest cycle = 1.1 lbs to 1.4 lbs (0.49 kgs to 0.63 kgs).			

Operating Pressures - Freeze Cycle

Air Temp. Entering Condenser °F/°C	Discharge Pressure	Suction Pressure
50°F 10°C	140-210 psig 9.7-14.5 bar	45-17 psig 3.1-1.2 bar
70°F 21°C	140-215 psig 9.7-14.8 bar	54-17 psig 3.7-1.2 bar
80°F 27°C	150-220 psig 10.3-15.2 bar	55-17 psig 3.8-1.2 bar
90°F 32°C	160-225 psig 11.0-15.5 bar	58-17 psig 4.0-1.2 bar
100°F 38°C	205-230 psig 14.1-15.9 bar	60-20 psig 4.1-1.4 bar
110°F 43°C	235-260 psig 16.2-18.0 bar	65-22 psig 4.5-1.5 bar

Operating Pressures - Harvest Cycle

Air Temp. Entering Condenser °F/°C	Discharge Pressure	Suction Pressure
50°F 10°C	95-120 psig 6.6-8.3 bar	65-95 psig 4.5-6.6 bar
70°F 21°C	100-120 psig 6.9-8.3 bar	70-95 psig 4.8-6.6 bar
80°F 27°C	105-120 psig 7.2-8.3 bar	75-95 psig 5.2-6.6 bar
90°F 32°C	120-140 psig 8.3-9.7 bar	90-114 psig 6.2-7.9 bar
100°F 38°C	140-160 psig 9.7-11.0 bar	110-135 psig 7.6-9.3 bar
110°F 43°C	160-185 psig 11.0-12.8 bar	100-155 psig 6.9-10.7 bar

Storage Capacity

Storage Bin Capacity*
90 lbs (40 kg)
*Storage Capacity is AHRI certified.

NOTE: Ice Production Derate %

- 60Hz Dice and Half Dice production derate as shown
- 60Hz Regular cube production derate is 7%.
- 50Hz Dice and Half Dice production derate is 12%.
- 50Hz Regular cube production derate is 14%.