

Figure 2. Base Case Narrow Coffin, Hill Phoenix ONZ

ONZ Narrow Single-Deck Island Merchandiser

8' & 12' (Frozen Food / Ice Cream)

Electrical Data

Case Length	Fans Per Case	Anti-Condensate Heaters										Defrost Heaters			
		High Efficiency Fans		Solid ² Front		Glass Front		Stainless Steel ³ Glass Cap (Glass Front Only)		Drain Heaters		208 Volts		240 Volts	
		120 Volts		120 Volts		120 Volts		120 Volts		120 Volts		Amps		Watts	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
F-8 ¹	3	0.45	33	1.31	157	1.51	181	0.42	49	0.13	15	7.69	1600	8.88	2130
F-12'	4	0.60	44	1.98	238	2.21	265	0.74	88	0.13	15	11.54	2400	13.31	3195
C-8'	3	0.45	33	1.31	157	1.51	181	0.42	49	0.13	15	11.54	2400	13.31	3195
C-12'	4	0.60	44	1.98	238	2.21	265	0.74	88	0.13	15	17.31	3600	19.98	4795

Guidelines & Control Settings

Application	°BTUH/ft		Superheat Set Point @ Bulb (°F)	Evaporator (°F)	Discharge Air (°F)	Discharge ⁵ Air Velocity (FPM)
	Conventional	Parallel				
Frozen Food	426	408	3-5	-12	-2	393
Ice Cream	488	468	3-5	-22	-13	400
Medium Temp.	317	310	6-8	17	24	400

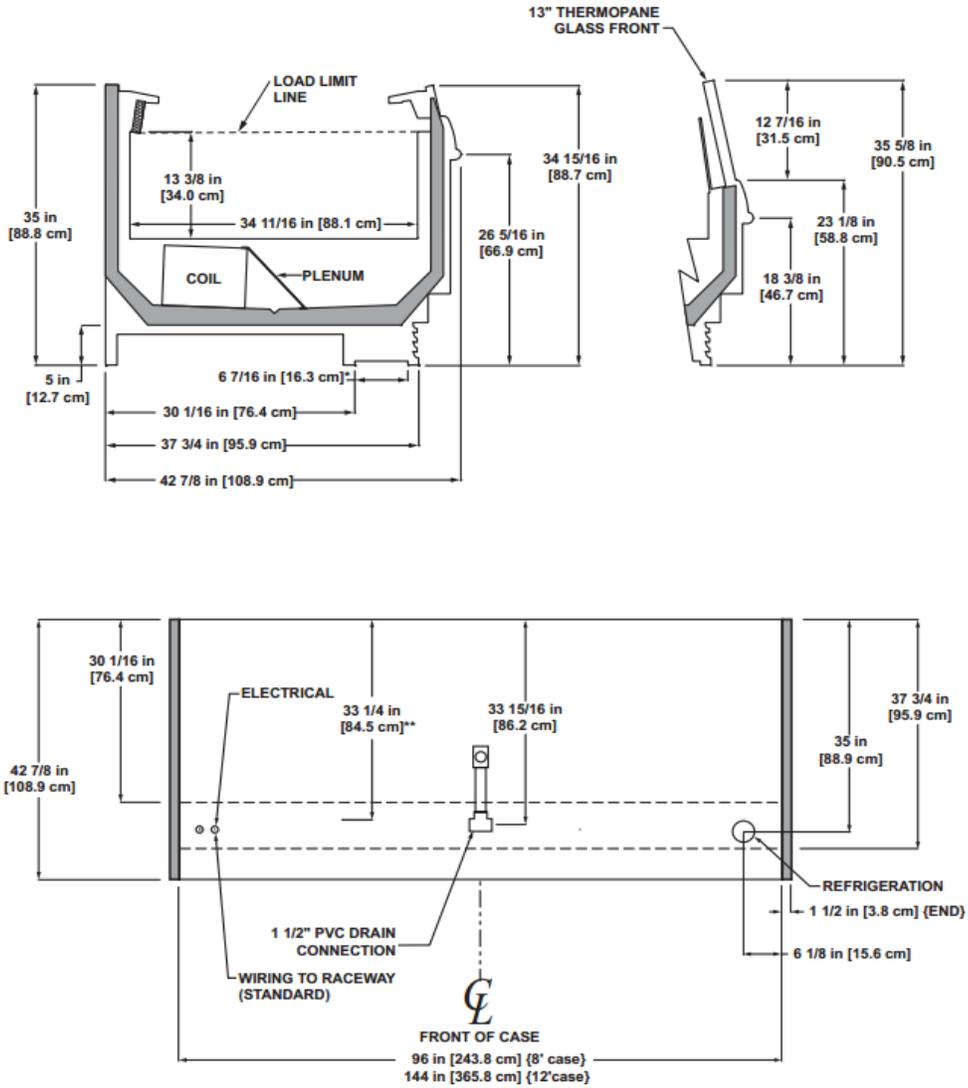
Defrost Controls

Application	Defrosts Per Day	Run-Off Time (min)	Electric Defrost		Timed-Off Defrost		Hot Gas Defrost		Reverse Air Defrost	
			Fail-Safe (min)	Termination Temp (°F)	Fail-Safe (min)	Termination Temp (°F)	Fail-Safe (min)	Termination Temp (°F)	Fail-Safe (min)	Termination Temp (°F)
Frozen Food / Ice Cream	2	13 - 15	35	47	-- ⁶	---	20	60	---	---
Medium Temp.	1	13 - 15	35	49	---	---	20	60	---	---

- 1 "F" = frozen food; "C" = ice cream.
- 2 Solid wrap-around ends have no anti-condensate heaters.
- 3 Data provided is for one wrap-around end; double numbers for two wrap-around ends. Data only applies to glass front cases.
- 4 Standard fans (see Appendix C) increase refrigeration load by 96 BTUH/fan.
- 5 Average discharge air velocity at peak °F defrost.
- 6 NOTE: "--" indicates that feature is not an option on this case model.

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NOTES:

- * STUB-UP AREA
- ** RECOMMENDED STUB-UP CENTERLINE FOR ELECTRICAL AND HUB DRAINS
- FRONT AND REAR SILL HEIGHTS VARY WITH BASEFRAME HEIGHT
- ENDS ADD APPROXIMATELY 1 INCH TO CASE HEIGHT
- SUCTION LINE - 7/8", LIQUID LINE - 3/8"
- DASHED LINES SIGNIFY AREA INSIDE BASE RAIL BEHIND KICK-PLATE

Measure Case Equipment

Figure 3. Measure Case Reach-in, Hill Phoenix ORZ

ORZ Reach-In Glass Door Merchandiser

2, 3, 4, 5 & 6-door (Frozen Food / Ice Cream)

Electrical Data

Doors	Fans Per Case	High Efficiency Fans		Defrost Heaters (1-Phase)				Defrost Heaters ¹ (3-Phase)			
		120 Volts		208 Volts		240 Volts		208 Volts		240 Volts	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps ²	Watts	Amps ²	Watts
2-door	2	0.31	18	10.99	2286	12.66	3038	7.61	2286	8.76	3038
3-door	3	0.46	28	12.40	2580	14.27	3425	8.59	2580	9.88	3425
4-door	4	0.61	37	16.29	3388	18.89	4533	11.28	3388	13.08	4533
5-door	5	0.77	46	19.89	4138	22.93	5503	13.78	4138	15.88	5503
6-door	6	0.92	55	23.09	4803	26.65	6395	16.28	4803	18.46	6395

Lighting Data

Doors	LED Lighting					
	Optimax Pro ³		GE IMMERSION		Crossfire ³ /Polaris	
	120 Volts		120 Volts		120 Volts	
	Amps	Watts	Amps	Watts	Amps	Watts
2-door	0.33	39	0.27	32	0.25	30
3-door	0.48	58	0.40	48	0.38	45
4-door	0.64	77	0.53	64	0.50	60
5-door	0.80	96	0.67	80	0.63	75
6-door	0.96	115	0.80	96	0.75	90

Anti-Condensate Heater Data

Doors	Anthony						Gemtron					
	ELMD		Eliminaator ⁴		Eliminaator 2 ⁴		Polar RE		Polar LE		Polar EF	
	120 Volts		120 Volts		120 Volts		120 Volts		120 Volts		120 Volts	
	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
2-door	2.13	256	1.74	209	1.21	145	2.12	254	1.38	166	1.17	140
3-door	3.15	378	2.58	309	1.78	213	3.15	378	2.05	246	1.73	207
4-door	4.18	502	3.36	403	2.30	276	4.18	501	2.71	325	2.28	273
5-door	5.21	625	4.22	506	2.89	346	5.27	632	3.43	412	2.89	347
6-door	6.19	743	5.06	607	3.47	416	6.23	747	4.03	483	3.38	405

ORZ Reach-In Glass Door Merchandiser

2, 3, 4, 5 & 6-door (Frozen Food / Ice Cream)

Guidelines & Control Settings

Application	Door	BTUH/door		Evaporator (°F)	Superheat Set Point @ Bulb (°F)	Discharge Air (°F)	Discharge ⁵ Air Velocity (FPM)
		Conventional	Parallel				
Frozen	ELMD/Polar RE	1044	1014	-11	3 - 5	-3	405
	Eliminaator/2; Polar LE/EF	988	960	-11	3 - 5	-3	405
Ice Cream	ELMD/Polar RE	1091	1060	-17	3 - 5	-8	405
	Eliminaator/2; Polar LE/EF	1027	998	-17	3 - 5	-8	405

Defrost Controls

Defrosts Per Day	Run-Off Time (min)	Electric Defrost		Timed-Off Defrost		Hot Gas Defrost		Reverse Air Defrost	
		Fail-Safe (min)	Termination Temp (°F)	Fail-Safe (min)	Termination Temp (°F)	Fail-Safe (min)	Termination Temp (°F)	Fail-Safe (min)	Termination Temp (°F)
1	13 - 15	46	73 ⁶	--- ⁷	---	24	73 ⁸	---	---

1 3-phase load is unbalanced.

2 Figure given is maximum line amperage per phase.

3 Low-power lights. High-power option available.

4 Values provided are for doors with no heat on the glass.

5 Average discharge air velocity at peak of defrost.

6 The recommended location is in the center of the coil on the second pass. If using a discharge air temperature to terminate defrost, utilize a 55°F termination temp.

7 NOTE: "---" indicates that feature is not an option on this case model.

8 The recommended location is on the dump line. If using a discharge air temperature to terminate defrost, utilize a 55°F termination temp.

ORZ Reach-In Glass Door Merchandiser

2, 3, 4, 5 & 6-door (Frozen Food / Ice Cream)

