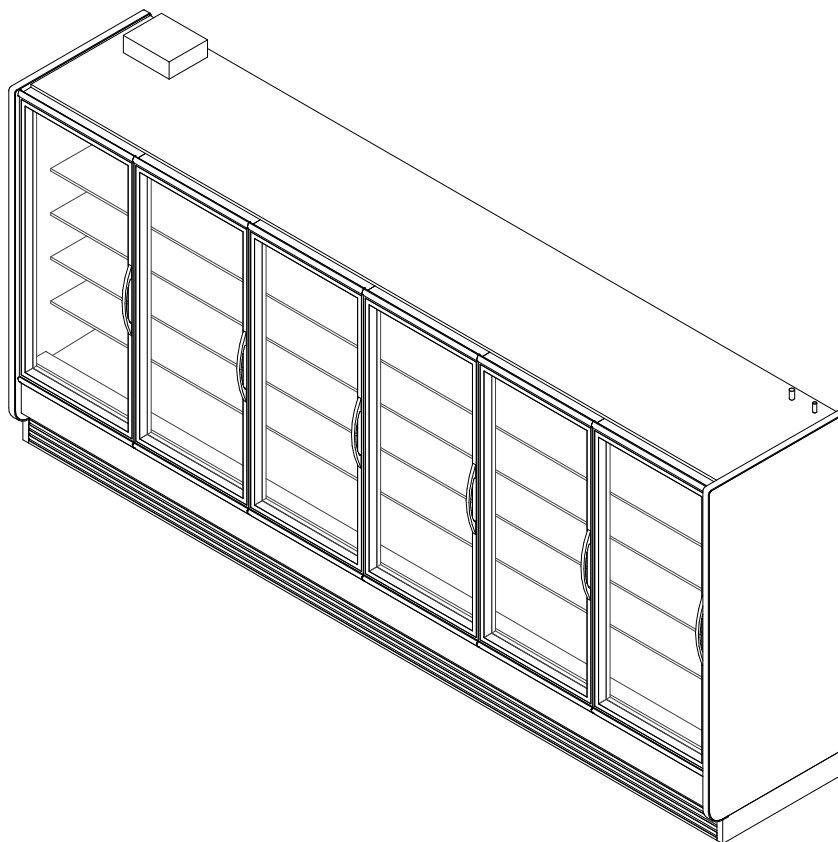


GENERAL NOTES

- 4-foot cases Bi-Swing consist of 2 (24") doors.
- 6-foot cases Bi-Swing consist of 3 (24") doors.
- 8-foot cases single swing consist of 3 (32") doors.
- 8-foot case Bi-swing consist of 4 (24") doors.
- 12-foot cases single swing consist of 4 (36") doors.
- 12-foot cases Bi-swing consist of 6 (24") doors.
- Lighting controls - occupancy sensors are required.
Option 1: OEM Provided: Lighting controls (on/off) are standard unless otherwise specified.
Option 2: End User Provided: Light controls should be based on occupancy sensors.



SHIPPING WEIGHT	
Case	Weight
ONRB	---



COMPONENT

ALL MEASUREMENTS ARE TAKEN PER ASHRAE-72-2005 SPECIFICATIONS. HILLPHOENIX REFRIGERATED DISPLAY CASES FOR SALE IN THE UNITED STATES MEET OR EXCEED DEPARTMENT OF ENERGY 2017 REQUIREMENTS.

ONRB

Rev. Date	Rev. #	Rev. Title
6-4-19	4	DATA UPDATE
1-9-19	3	ENDVIEW UPDATE

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ELECTRICAL DATA			
Case Length	Fans Per Case	High Efficiency Fans	
		120 Volt	
		Amps	Watts
1 Door	1	0.22	26
2 Door	2	0.44	53
3 Door	3	0.66	79
4 Door	4	0.88	106
5 Door	5	1.1	132
6 Door	6	1.32	158
4'	1	0.22	26
6'	2	0.44	53
8'	2	0.44	53
12'	3	0.66	79

LIGHTING DATA					
Case Length	Door Size	OP45		OP55 (French Swing Only)	
		120 Volts		120 Volts	
		Amps	Watts	Amps	Watts
1 Door	31"	0.18	21.0	---	---
2 Door	30"	0.36	43.1	---	---
3 Door	30"	0.54	65.2	---	---
4 Door	30"	0.73	87.3	---	---
5 Door	30"	0.91	109.4	---	---
6 Door	30"	1.10	131.5	---	---
4'	24"	---	---	0.26	31.0
6'	24"	---	---	0.52	61.9
8'	24"	---	---	0.52	61.9
8'	32"	0.54	65.2	---	---
12'	24"	---	---	0.77	92.8
12'	36"	0.73	87.3	---	---

NOTES

- "----" indicates that this feature is not an option on this case model.
- Anti-condensate heat values represent a door with no heat.
- Listed discharge air velocity represents the average velocity at the peak of defrost.
- Temperature and defrost settings listed above are recommended start-up settings. Final operational settings may need to be adjusted for the store conditions in which the case operates.
- The recommended evaporator temperatures may need to be adjusted based on system setup, store conditions, etc. The minimum recommended evaporator temperature is 4°F below the listed evaporator temperature.
- Light wattages above reflect 100% run time. To acquire DOE representation, reduce light wattage by 42% at 75°F/55%RH conditions, reduce the light wattages above by 42%.
- Data listed is for Optimax Radiant and low power Optimax Pro (high power available). For other lighting options please contact your sales representative.



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ONRB

Rev. Date	Rev. #	Rev. Title
6-4-19	4	DATA UPDATE
1-9-19	3	ENDVIEW UPDATE

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ANTI CONDENSATE DATA						
Case Length	Door Size	Number of Doors	101 Frames		Vista Frames	
			Un Heated Doors		Un Heated Doors	
			ELMD, ELMH, I90		Vista C, I60, Elite	
			120 Volts		120 Volts	
			Amps	Watts	Amps	Watts
1 Door	31"	1	0.16	19	0.16	19
2 Door	30"	2	0.32	38	0.32	38
3 Door	30"	3	0.50	60	0.50	60
4 Door	30"	4	0.69	83	0.69	83
5 Door	30"	5	0.86	103	0.86	103
6 Door	30"	6	1.06	127	1.06	127
4'	24"	2	0.18	22	0.18	22
6'	24"	3	0.35	42	0.35	42
8'	24"	4	0.39	47	0.39	47
8'	32"	3	0.51	61	0.51	61
12'	24"	6	0.63	76	0.63	76
12'	36"	4	0.74	89	0.74	89

GUIDLINES AND CONTROL DATA								
Application	Case Length	Door Size	BTUH/Door		Superheat Set Point @ Bulb (°F)	Evaporator (°F)	Discharge Air (°F)	Discharge Air Velocity (FPM)
			Conventional	Parallel				
Beverage	1-6 Door	30"	510	465	4 - 6	34	40	250
Beverage	4'	24"	405	370	4 - 6	34	40	250
Beverage	6'	24"	405	370	4 - 6	34	40	250
Beverage	8'	24"	405	370	4 - 6	34	40	250
Beverage	8'	32"	540	495	4 - 6	34	40	250
Beverage	12'	24"	405	370	4 - 6	34	40	250
Beverage	12'	36"	610	555	4 - 6	34	40	250
Deli / Dairy	1-6 Door	30"	520	475	4 - 6	30	36	250
Deli / Dairy	4'	24"	415	380	4 - 6	30	36	250
Deli / Dairy	6'	24"	415	380	4 - 6	30	36	250
Deli / Dairy	8'	24"	415	380	4 - 6	30	36	250
Deli / Dairy	8'	32"	555	510	4 - 6	30	36	250
Deli / Dairy	12'	24"	415	380	4 - 6	30	36	250
Deli / Dairy	12'	36"	625	570	4 - 6	30	36	250
Meat	1-6 Door	30"	600	550	4 - 6	28	34	250
Meat	4'	24"	480	440	4 - 6	28	34	250
Meat	6'	24"	480	440	4 - 6	28	34	250
Meat	8'	24"	480	440	4 - 6	28	34	250
Meat	8'	32"	640	590	4 - 6	28	34	250
Meat	12'	24"	480	440	4 - 6	28	34	250
Meat	12'	36"	720	660	4 - 6	28	34	250

DEFROST CONTROLS		
Defrosts Per Day	Timed-Off Defrost	
	Fail-Safe (Min)	Termination Temp (°F)
4	30	47



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ONRB

Rev. Date	Rev. #	Rev. Title
6-4-19	4	DATA UPDATE
1-9-19	3	ENDVIEW UPDATE

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ONRB

Narrow Reach-In Merchandiser
1, 2, 3, 4, 5 & 6 Door / 4', 6', 8' & 12' (Beverage / Dairy / Deli / Meat)

SECOND NATURE DATA

Case Model	No. of Coils	Application	Front Sill height	BTUH/FT		GPM/ft (DR)	Supply Fluid Temp (°F)	Discharge Air Temp (°F)
				Conventional	Parallel			
ONRB (30" DOOR)	1	Beverage	Std. Reach In	510	465	0.06	20	38
ONRB (30" DOOR)	1	Deli/Dairy	Std. Reach In	520	475	0.08	20	36
ONRB (30" DOOR)	1	Meat	Std. Reach In	600	550	0.11	20	34
ONRB (30" DOOR)	1	Beverage	Std. Reach In	510	465	0.08	25	38
ONRB (30" DOOR)	1	Deli/Dairy	Std. Reach In	520	475	0.12	25	36
ONRB (30" DOOR)	1	Meat	Std. Reach In	600	550	0.16	25	34
ONRB (PER FOOT)	1	Beverage	Std. Reach In	203	185	0.02	20	34
ONRB (PER FOOT)	1	Deli/Dairy	Std. Reach In	208	190	0.03	20	34
ONRB (PER FOOT)	1	Meat	Std. Reach In	240	220	0.04	20	34
ONRB (PER FOOT)	1	Beverage	Std. Reach In	203	185	0.03	25	34
ONRB (PER FOOT)	1	Deli/Dairy	Std. Reach In	208	190	0.05	25	34
ONRB (PER FOOT)	1	Meat	Std. Reach In	240	220	0.06	25	34

SECOND NATURE DATA

Case Model	No. of Coils	Application	Front Sill height	Supply Fluid Temp (°F)	No. of Defrost	Timed-Off Defrost		Warm Fluid Defrost	
						Fail-Safe (Min)	Termination Temp (°F)	Fail-Safe (Min)	Termination Temp (°F)
ONRB (30" DOOR)	1	Beverage	Std. Reach In	20	4	60	47	26	49
ONRB (30" DOOR)	1	Deli/Dairy	Std. Reach In	20	4	60	47	26	49
ONRB (30" DOOR)	1	Meat	Std. Reach In	20	4	60	47	26	49
ONRB (30" DOOR)	1	Beverage	Std. Reach In	25	4	45	47	26	49
ONRB (30" DOOR)	1	Deli/Dairy	Std. Reach In	25	4	45	47	26	49
ONRB (30" DOOR)	1	Meat	Std. Reach In	25	4	45	47	26	49
ONRB (PER FOOT)	1	Beverage	Std. Reach In	20	4	60	47	26	49
ONRB (PER FOOT)	1	Deli/Dairy	Std. Reach In	20	4	60	47	26	49
ONRB (PER FOOT)	1	Meat	Std. Reach In	20	4	60	47	26	49
ONRB (PER FOOT)	1	Beverage	Std. Reach In	25	4	45	47	26	49
ONRB (PER FOOT)	1	Deli/Dairy	Std. Reach In	25	4	45	47	26	49
ONRB (PER FOOT)	1	Meat	Std. Reach In	25	4	45	47	26	49

NOTES

- All medium temperature data listed is for 35% by wt. PROPYLENE GLYCOL.
- Inhibited Propylene Glycol solution with water, such as Dowfrost or equivalent. (Dowfrost is a trademark of the Dow Chemical Company).
- Flowrates are determined by ASHRAE test conditions and may need to be adjusted based on store conditions.
- ** Flowrates are per case

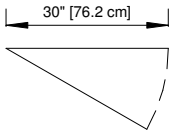
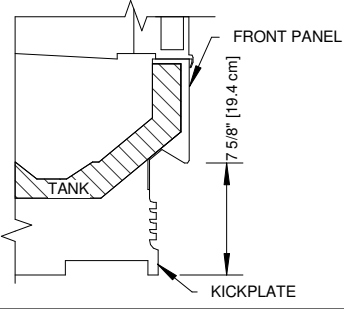
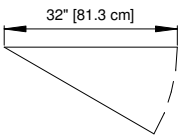
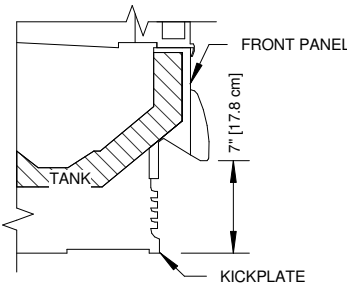
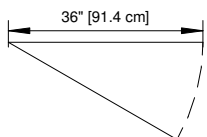
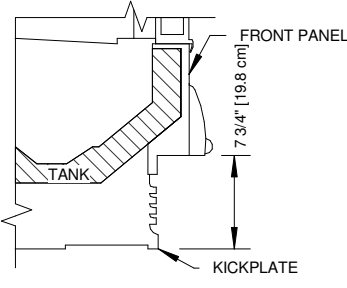
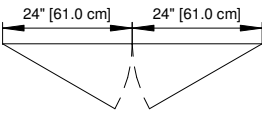
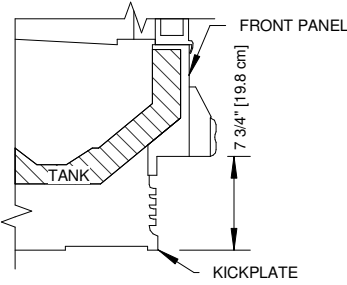


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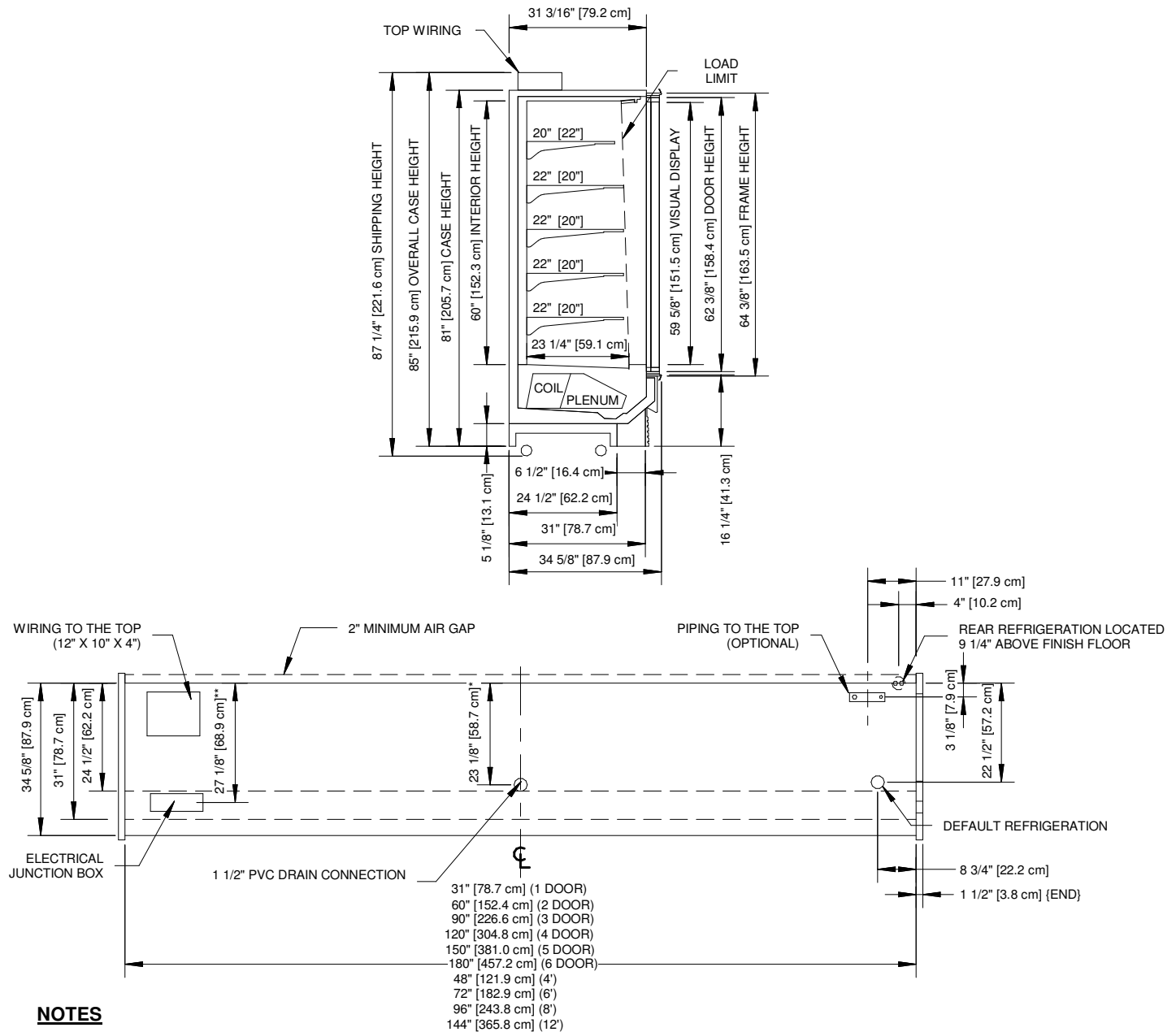
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Rev. Date	Rev. #	Rev. Title
6-4-19	4	DATA UPDATE
1-9-19	3	ENDVIEW UPDATE

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DOOR OPTIONS	FRONT OPTIONS
<p>STANDARD SWING DOOR 1, 2, 3, 4, 5, & 6 - DOOR CASES</p> 	<p>FLAT FRONT (O SERIES)</p> 
<p>STANDARD SWING DOOR 8' CASE</p> 	<p>STREAMLINE BUMPER</p> 
<p>STANDARD SWING DOOR 12' CASE</p> 	<p>HALF BUMPER</p> 
<p>BI-SWING DOOR 4', 6', 8' & 12' CASES</p> 	<p>CLASSIC 2 BUMPER</p> 

Rev. Date	Rev. #	Rev. Title
6-4-19	4	DATA UPDATE
1-9-19	3	ENDVIEW UPDATE



- Ends add approximately 1" to case height, 1/2" to the back & 1" to the front.
- Back panels add approximately 1" to the rear of the case.
- Vented kickplate adds 3/4".



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