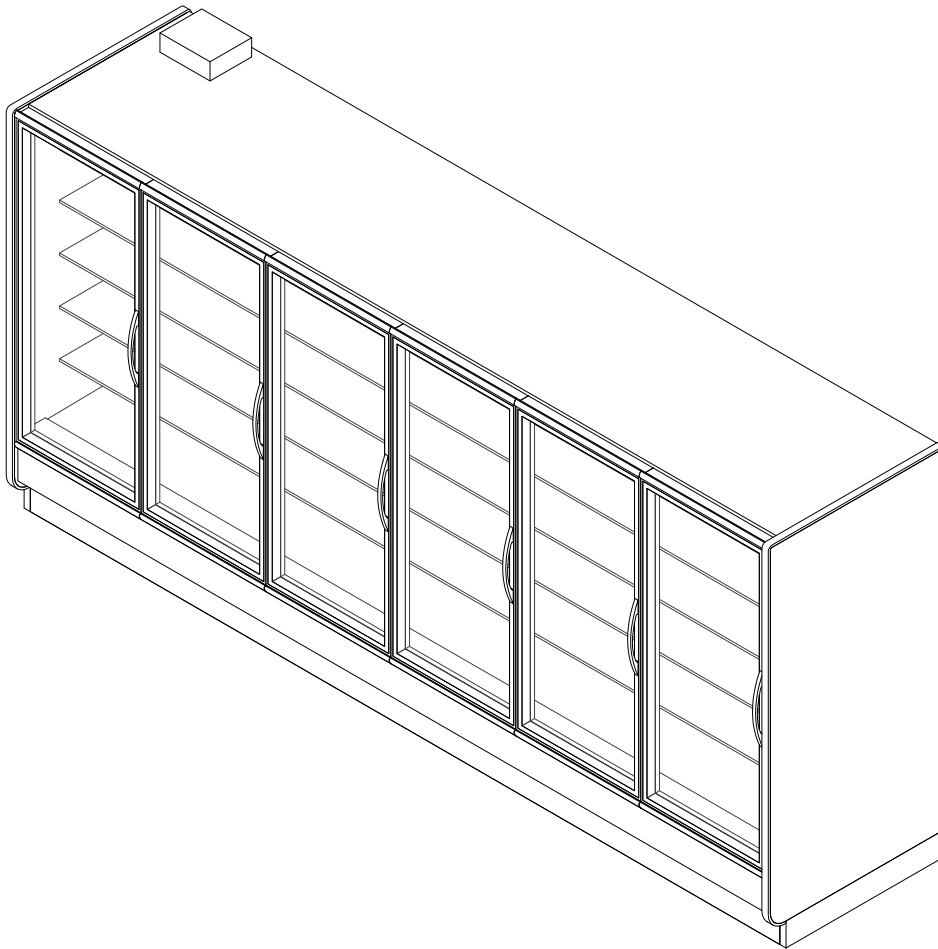


GENERAL NOTES

- Light controls - occupancy sensors are required.
Option 1: OEM Provided: OEM anti-condensate and lighting controls (on/off) are standard unless otherwise specified.
Option 2: End User Provided: Light controls should be based on occupancy sensors. Store level A/S control should be set to 30% minimum off time at 75°F/55%RH.



SHIPPING WEIGHT	
Case	Weight
ORZH	1000-2000 LBs



COMPONENT

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ELECTRICAL DATA

Case Length	Fans Per Case	High Efficiency Fans		Drain Heater		Defrost Heaters (1-Phase)				Defrost Heaters (3-Phase)			
		120 Volts		120 Volts		208 Volts		240 Volts		208 Volts		240 Volts	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
1 Door	1	0.3	25	0.94	113	3.2	680	3.8	906	2.8	680	3.3	906
2 Door	2	0.6	50	1.30	152	7.5	1552	8.6	2068	6.5	1552	7.5	2068
3 Door	3	1	75	1.50	171	10.9	2274	12.6	3018	9.5	2274	10.9	3018
4 Door	4	1.3	100	1.90	226	14.3	2984	16.6	3992	12.4	2984	14.4	3392
5 Door	5	1.6	125	2.30	275	17.5	3640	20.2	4840	15.1	3640	17.4	4840
6 Door	6	1.9	150	2.70	320	20.3	4224	23.4	5624	17.6	4224	20.3	5624

LIGHTING DATA

Case Length	Door Size	OP45		Optimax Pro 24 Low	
		120 Volts		120 Volts	
		Amps	Watts	Amps	Watts
1 Door	31"	0.18	21.0	0.16	18.8
2 Door	30"	0.36	43.1	0.31	36.8
3 Door	30"	0.54	65.2	0.46	54.8
4 Door	30"	0.73	87.3	0.61	72.8
5 Door	30"	0.91	109.4	0.76	90.8
6 Door	30"	1.10	131.5	0.91	108.8

ANTI CONDENSATE DATA

Case Length	Door Size	Number of Doors	Individual Circuits									
			I90 Doors				ELMD, ELMH, Doors				Door Frame	
			Heated Doors		Low E Doors		Heated Doors		Low E Doors		101-LE	
			120 Volts		120 Volts		120 V		120 V		120 V	
			Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
1 Door	31"	1	0.28	34	0.17	20	0.32	38	0.19	23	0.76	91
2 Door	30"	2	0.56	67	0.34	40	0.64	76	0.38	45	1.26	151
3 Door	30"	3	0.84	101	0.51	61	0.95	114	0.57	68	1.76	211
4 Door	30"	4	1.12	135	0.67	81	1.27	152	0.76	91	2.29	275
5 Door	30"	5	1.40	169	0.84	101	1.59	191	0.95	114	2.78	334
6 Door	30"	6	1.69	202	1.01	121	1.91	229	1.14	136	3.28	394

NOTES

- "---" indicates that this feature is not an option on this case model.
- Drain heater and fan motors share the same circuit (separate cycles). Electrical circuits must be properly sized to accommodate the higher current draw of the tank heater.
- Defrost heater 3-phase load is unbalanced.
- 3-phase defrost heater data listed represents the maximum amps per phase.
- Data listed is for Optimax Radiant and low power Optimax Pro (high power available). For other lighting options please contact your sales representative.
- Anti-condensate heat values for Low E doors represent a door with no heat on the glass.
- Listed discharge air velocity represents the average velocity at the peak of defrost.
- 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.
- No run-off time required for electrical defrost.
- Heated doors (heat on the glass) require anti-condensate and lighting controls. Frame A/S heat is cycled off during defrost cycles.
- Light and A/S wattages above reflect 100% run time. To determine actual daily energy usage at 75°F/55%RH conditions, reduce the light wattages above by 42% and reduce the A/S values above by the minimum off time.



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GUIDELINES AND CONTROL DATA							
Application	Door	BTUH/door		Superheat Set Point @ Bulb (°F)	Evaporator (°F)	Discharge Air (°F)	Discharge Air Velocity (FPM)
		Conventional	Parallel				
Frozen	Heated	1044	1014	3-5	-7	-1	350
Frozen	Low E	988	960	3-5	-7	-1	350
Ice Cream	Heated	1091	1060	3-5	-15	-8	350
Ice Cream	Low E	1027	998	3-5	-15	-8	350

DEFROST DATA						
Defrosts Per Day	Electric Defrost			Hot Gas Defrost		
	Fail-Safe (Min)	Termination Temp (°F)	Run-Off Time (Min)	Fail-Safe (Min)	Termination Temp (°F)	Run-Off Time
1	46	50	0	24	73	13-15

NOTES

- "---" indicates that this feature is not an option on this case model.
- Drain heater and fan motors share the same circuit (separate cycles). Electrical circuits must be properly sized to accommodate the higher current draw of the tank heater.
- Defrost heater 3-phase load is unbalanced.
- 3-phase defrost heater data listed represents the maximum amps per phase.
- Data listed is for Optimax Radiant and low power Optimax Pro (high power available). For other lighting options please contact your sales representative.
- Anti-condensate heat values for Low E doors represent a door with no heat on the glass.
- 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.
- No run-off time required for electrical defrost.
- Typical electric defrost time is 20 minutes when ambient conditions are 75°F/55%RH.
- Low energy doors (no heat on the glass) do not require anti-condensate or lighting controls. Frame A/S heat is cycled off during defrost cycles.
- Heated doors (heat on the glass) require anti-condensate and lighting controls. Frame A/S heat is cycled off during defrost cycles.
- Light and A/S wattages above reflect 100% run time. To determine actual daily energy usage at 75°F/55%RH conditions, reduce the light wattages above by 42% and reduce the A/S values above by the minimum off time.



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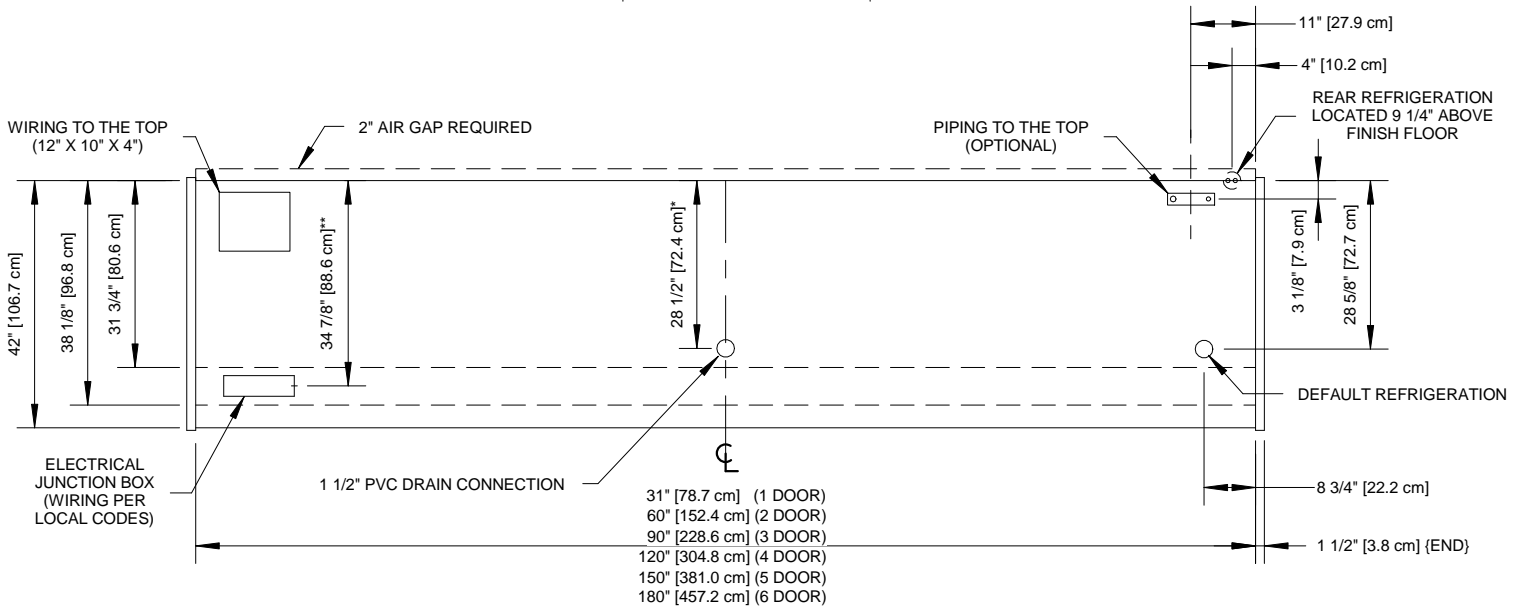
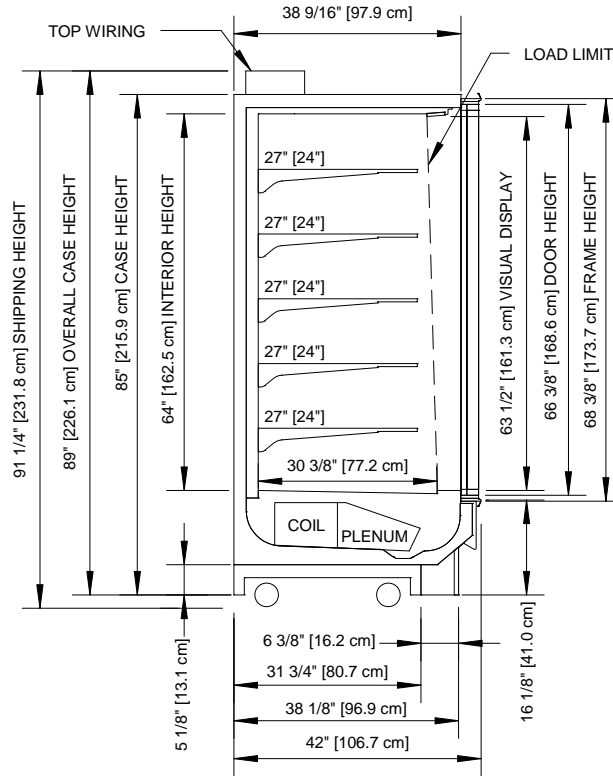
DOOR OPTIONS	FRONT OPTIONS
<p>STANDARD SWING DOOR 2,3,4,5 - DOOR CASES</p>	<p>FLAT FRONT (O SERIES)</p>
	<p>STREAMLINE BUMPER</p>
	<p>HALF BUMPER</p>



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NOTES

* : STUB-UP AREA.

** : RECOMMENDED STUB-UP CENTERLINE FOR ELECTRICAL AND HUB DRAINS.

- Ends add approximately 1" to case height, 1/2" to the back & 1" to the front.



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