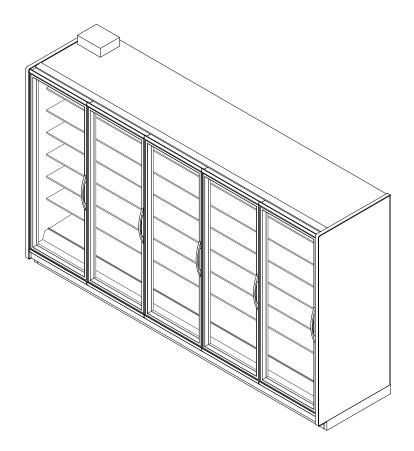
GENERAL NOTES:

- · 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				
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■ COMPONENT

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ELECTRICAL DATA									
		High Effi	iciency						
		Far	ıs	Drain I	Heaters	Defros	t Heate	ers (1 - F	Phase)
Case	Case Fans Per		olts/	120	Volts	208	Volts	240 Volts	
Length	Case	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
1 Door	1	0.40	26	0.90	113	3.27	680	3.78	906
2 Door	2	0.60	52	1.27	152	7.46	1552	8.62	2068
3 Door	3	1.00	78	1.43	171	10.93	2274	12.58	3018
4 Door	4	1.30	104	1.89	227	14.35	2984	16.63	3992
5 Door	5	1.60	130	2.29	275	17.50	3640	20.17	4840

LIGHTING	LIGHTING DATA						
		OF	P45	OP7 Single Swing			
Case		120	120 Volts		Volts		
Length	Door Size	Amps	Watts	Amps	Watts		
1 Door	31"	0.18	21.0	0.17	20.4		
2 Door	30"	0.36	43.1	0.33	39.7		
3 Door	30"	0.54	65.2	0.49	59.0		
4 Door	30"	0.73	87.3	0.65	78.3		
5 Door	30"	0.91	109.4	0.81	97.6		

ANTI CONDENSATE DATA											
						Individ	dual Circuit	is			
			190	Doors			ELMD,EI	MH Doors		Door	Frame
		Heated	d Doors	Low E	Doors	Heated	d Doors	Low E	Doors	101-LE	
		120	Volts	120	Volts	120	Volts	120 \	Volts	120	Volts
Case Length	Door Size	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
1 Door	31"	0.33	39	0.19	23	0.36	44	0.21	25	0.86	103
2 Door	30"	0.65	78	0.38	46	0.73	87	0.42	50	1.41	169
3 Door	30"	0.98	118	0.58	69	1.09	131	0.63	75	1.97	236
4 Door	30"	1.31	157	0.77	92	1.45	174	0.84	100	2.56	307
5 Door	30"	1.63	196	0.96	115	1.82	218	1.05	126	3.09	371



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GUIDELINES AN	GUIDELINES AND CONTROL SETTINGS								
			BTUH/Door		Superheat Set				
					Point @ Bulb	Evaporator	Discharge	Discharge Air	
Case Length	Application	Door	Conventional	Parallel	(°F)	(°F)	Air (°F)	Velocity (FPM)	
1 Door	Frozen	Heated	1510	1495	3 - 5	- 7	- 1	255	
1 Door	Frozen	Low E	1480	1460	3 - 5	- 7	- 1	255	
1 Door	Ice Cream	Heated	1675	1655	3 - 5	- 15	- 8	255	
1 Door	Ice Cream	Low E	1640	1615	3 - 5	- 15	- 8	255	

			BTUH/Door		Superheat Set			
					Point @ Bulb	Evaporator	Discharge	Discharge Air
Case Length	Application	Door	Conventional	Parallel	(°F)	(°F)	Air (°F)	Velocity (FPM)
2 - 5 Door	Frozen	Heated	1173	1149	3 - 5	- 7	- 1	550
2 - 5 Door	Frozen	Low E	1150	1126	3 - 5	- 7	- 1	550
2 - 5 Door	Ice Cream	Heated	1262	1236	3 - 5	- 15	- 8	550
2 - 5 Door	Ice Cream	Low E	1237	1211	3 - 5	- 15	- 8	550

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

Notes:

- "---" indicates that this feature is not an option on this case model.
- Door / Frame A/S circuits and fans share the same circuit (same cycle). Default jumpers can be removed in field if separate circuits are desired for A/S and fans.
- Drain heater and fan motors share the same circuit (separate cycles). Electrical circuits must be properly sized to accomodate 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. 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.
- Defrost Run-off Time applies to Hot Gas Defrost only. Electric Defrost has a 0-minute run-off time.
- 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

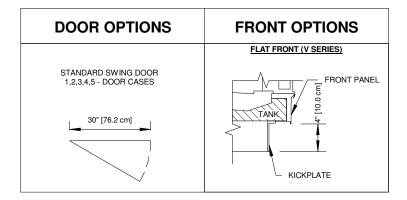




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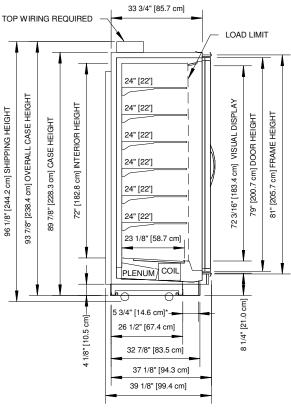
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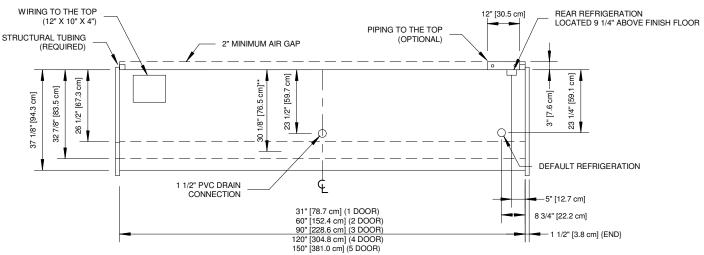
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Notes:

- * : 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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