



# Crystal Merchandiser® RVMC24D Deep Specs

Medium Temp Deep Reach-Ins with 24" x 74" CoolView® Ultra™ Doors  
 RVMC24D-(B,D,P,M): D=Deep (B=Beverage, D=Dairy/Deli, P=Produce, M=Meat)

## Refrigeration Data

Refrigeration	Lineup Data	Individual Case Data (Includes 1 Pair of End Panels)			
	Per Door Avg	2-Door	3-Door	4-Door	6-Door
Evaporator Temperature (°F) <sup>1</sup>	28	28	28	28	28
Baseline Btu/h <sup>2,3</sup>	410	930	1,360	1,740	2,570
Discharge Air Temperature (°F) (w/ 8°F Superheat)	33	33	33	33	33
Btu/h Adders	Per Door Avg				
Rail Heated Doors (Zero Zone CoolView Ultra)	10				
Rail & Glass Heated Doors (Zero Zone CoolView Ultra)	30				
Optional Glass Windowed End Panel (Each) <sup>4</sup>	410				

Glycol Data <sup>5</sup>	2-Door	3-Door	4-Door	6-Door
Flow Rate (GPM)	0.6	0.8	1.2	1.8
Pressure Drop (PSIG)	2.0	3.3	6.1	5.8

## Electrical & Energy Data <sup>6</sup>

Fan Motors (115V) <sup>7</sup>	Lineup Data		Individual Case Data (Includes 1 Pair of End Panels)							
	Per Door Avg		2-Door		3-Door		4-Door		6-Door	
	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
High Efficiency Electronic (ECM or SSC)	0.30	8	0.60	15	0.60	22	0.60	25	0.90	31
Lighting System (120V) (Zero Zone ChillBrite 4234)	Per Door Avg		2-Door		3-Door		4-Door		6-Door	
	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
Same-Swing Doors (Fig. 1: Options A & B)	0.16	19	0.33	39	0.48	58	0.64	77	1.00	115
French-Swing Doors (Fig. 1: Options C, D, E, F for 3-Door)	0.15	18	0.30	36	0.53	64	0.60	72	0.90	108
Anti-Sweat Heat (115V) <sup>8</sup>	Per Door Avg		2-Door		3-Door		4-Door		6-Door	
	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
No-Energy Doors (Zero Zone CoolView Ultra)	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0
Rail Heated Doors (Zero Zone CoolView Ultra)	0.05	6	0.09	10	0.14	16	0.19	22	0.28	32
Rail & Glass Heated Doors (Zero Zone CoolView Ultra)	0.16	18	0.31	36	0.47	54	0.63	72	0.94	108

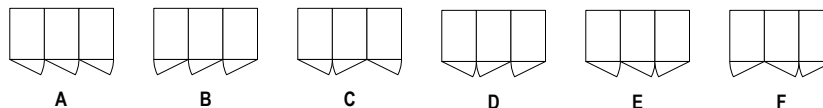
## Physical Data

Refrigeration Piping: R-404A & R-448A <sup>9</sup>	Outlet Size (in.)			
	2-Door	3-Door	4-Door	6-Door
Suction Line O.D. (Top Refrigeration Exit)	1/2	1/2	1/2	1/2
Liquid Line O.D.	3/8	3/8	3/8	3/8
Refrigeration Piping: CO2 <sup>9</sup>	2-Door	3-Door	4-Door	6-Door
Suction Line O.D. (Top Refrigeration Exit)	3/8	3/8	3/8	3/8
Liquid Line O.D.	3/8	3/8	3/8	3/8

Case Calculations	Solid End Panel	Windowed End	2-Door	3-Door	4-Door	6-Door
Facings (ft. <sup>2</sup> )	N/A	N/A	23.7	35.2	46.7	69.8
Packout (ft. <sup>3</sup> ) 24" Shelves	N/A	N/A	48.1	71.5	95.1	141.9
Packout (ft. <sup>3</sup> ) 27" Shelves	N/A	N/A	53.0	78.8	104.8	156.5
Weight (lbs.)	30	55	775	933	1,020	1,254

FIG. 1: 3-Door Configuration Options



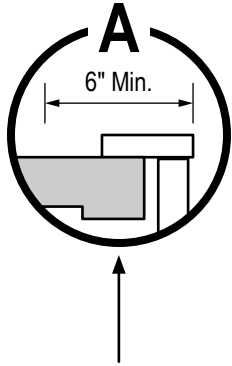
**Notes:**

- For high-glide refrigerants, use dew point for unit sizing. Adjust evaporator pressure as needed to maintain discharge air temperatures.
- Baseline Evaporator Btu/h based on parallel rack system, LED Lighting (Zero Zone ChillBrite® 4234), no-energy doors (Zero Zone CoolView® Ultra™), and ECM or SSC electronic fan motors.
- For condensing units (non-rack system), multiply total Btu/h rating by 1.08.
- Glass windowed end panels only available with 2 1/2" end panels.
- All glycol data based on 35% propylene glycol by weight, 20°F supply temperature, and 23°-24°F outlet temperature.
- Amps are based on electrical nameplate values. Watts are based on laboratory observations of actual energy use.
- 2 to 4-door cases use two fan motors. 6-door cases use three fan motors.
- Door (Anti-Sweat) Options: no-energy = no-heat glass and no-heat rails. Rail heat and glass heat available.
- Individual risers for circuits of more than one case require refrigeration line sizing by Zero Zone.

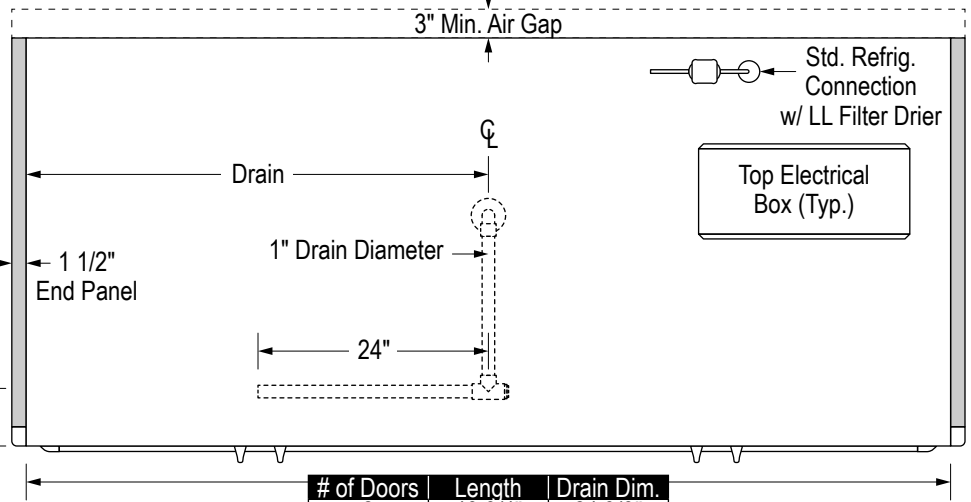


# Crystal Merchandiser® RVMC24D Deep Specs

Medium Temp Deep Reach-Ins with 24" x 74" CoolView® Ultra™ Doors  
 RVMC24D-(B,D,P,M): D=Deep (B=Beverage, D=Dairy/Deli, P=Produce, M=Meat)

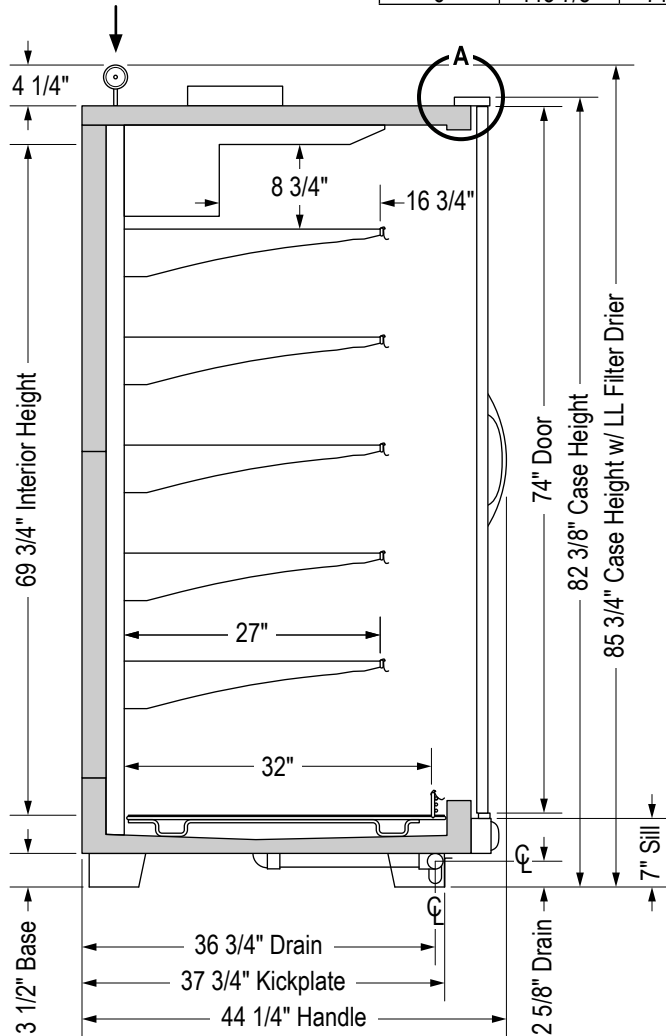


Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.



# of Doors	Length	Drain Dim.
2	48 3/4"	24 3/8"
3	72 1/2"	36 1/4"
4	96 3/8"	48 1/8"
6	143 7/8"	71 7/8"

Top refrigeration connection with LL Filter Drier increases case height by up to 4 1/4".



SS-29-N

Specifications are subject to change without notice. All dimensions are nominal.  
 Case designed to operate in an ambient temperature of 75°F and relative humidity of 55% or lower.

10/19/2022



Zero Zone, Inc.  
 800-247-4496 • www.zero-zone.com  
 © 2022 Zero Zone, Inc.

