



**CRYSTAL**  
merchandiser®

## Crystal Merchandiser® RVMC24 Specs

Medium Temp Reach-In Remote Display Cases

2-Door, 3-Door, 4-Door, and 6-Door Cases; Rear Load (RL) Cases

### Quick Specs

**Energy (Btu/h per Door)\***

**Standard:** 410 at 28°F Evaporator

\*when used with parallel rack system

**Merchandising (6-Door)**

**Facings:** 69.8 ft<sup>2</sup>

**Packout:** 133.4 ft<sup>3</sup> with 24" x 24" deep shelves

### Features & Options

#### Go Green

Remote cases ready for CO<sub>2</sub>

#### High Humidity

Control climate challenges with our advanced humidity package

#### CoolView® Doors

24" wide x 74" tall CoolView® Ultra® Doors

#### LED Lighting

ChillBrite® 3500K or 4000K LED Lighting

#### Additional Models

The Crystal medium temp with 24" French doors offers a standard, rear load, deep, deep rear load, ultra-narrow, and back-to-back ultra-narrow model

#### Hybrid™ Display Case

Available as Hybrid™ cases with R-404A or R-448A

### Applications



Beverage



Dairy



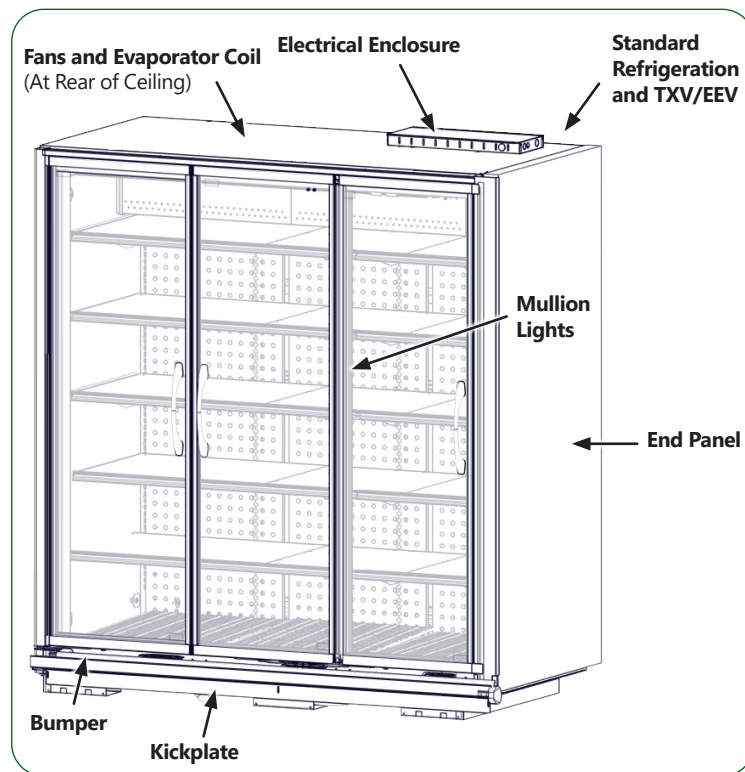
Produce



Meat



Floral



Manuals and Instructions:

<https://www.zero-zone.com/rvmc-rvlc>



**Contact Us:**

800-247-4496

[www.zero-zone.com](http://www.zero-zone.com)

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.



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## Refrigeration Data <sup>1</sup>



Set Points	°F
Evaporator Temperature <sup>2</sup>	28
Discharge Air Temperature (w/ 8°F Superheat)	33

Notes:

1. Crystal Merchandiser® Rear Load cases must be installed in front of the opening in a walk-in cooler.
2. For high-glide refrigerants, use dew point for unit sizing. Adjust evaporator pressure as needed to maintain discharge air temperatures.



Energy Use with Parallel Rack System <sup>3</sup>	Lineup Data	Individual Case Data (includes 1 pair of end panels)			
	Per Door Avg	2-Door	3-Door	4-Door	6-Door
RVMC24 Baseline Btu/h	410	930	1,360	1,740	2,560
RVMC24RL Baseline Btu/h	410	930	1,360	1,740	2,560
Energy Use with Condensing Unit <sup>3</sup>	Per Door Avg	2-Door	3-Door	4-Door	6-Door
RVMC24 Baseline Btu/h	440	1,005	1,470	1,880	2,765
RVM24RL Baseline Btu/h	440	1,005	1,470	1,880	2,765
Btu/h Adders	Per Door Avg	2-Door	3-Door	4-Door	6-Door
Rail Heated Doors (Zero Zone CoolView® Ultra®)	+10	+20	+30	+40	+60
Rail & Glass Heated Doors (Zero Zone CoolView® Ultra®)	+30	+60	+90	+120	+180
End Panels	Btu/h Per Case				
Glass Windowed End Panel (1-Pair) <sup>4</sup>	+410				

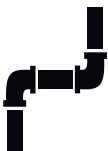
Notes:

3. Baseline Evaporator Btu/h based on LED lighting (Zero Zone ChillBrite® 4000K), no-energy doors (Zero Zone CoolView® Ultra®), and ECM or SSC electronic fan motors.
4. Glass windowed end panels only available with 2 1/2" end panels.

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

Notes:

5. All Glycol data based on 35% propylene glycol by weight, 20°F supply temperature, and 23°-24°F outlet temperature.



Refrigeration Piping: R-404A & R-448A <sup>6</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: CO <sub>2</sub> <sup>6</sup>	2-Door	3-Door	4-Door	4-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

Notes:

6. Individual risers for circuits of more than one case require refrigeration line sizing by Zero Zone. Refer to the Installation & Operation Manual for details.



Electrical & Energy Data <sup>7</sup>



Fan Motors (115V)	Per Door Avg		2-Door		3-Door		4-Door		6-Door	
Number of Fans	--		2		2		2		3	
Fan Motors (115V)	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
High-Efficiency Electronic (ECM or SSC)	0.42	8	0.84	15	0.84	22	.84	25	1.26	31
Lighting System (120V)	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)	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®) <sup>8</sup>	0.05	6	0.09	10	0.14	16	0.19	22	0.28	32
Rail & Glass Heated Doors (Zero Zone CoolView® Ultra®) <sup>8</sup>	0.16	18	0.31	36	0.47	54	0.63	72	0.94	108

Notes:

- 7. Amps are based on electrical nameplate values. Watts are based on laboratory observations of actual energy use.
- 8. High-humidity package includes glass heat, rail heat, and mullion heat.

Physical Data

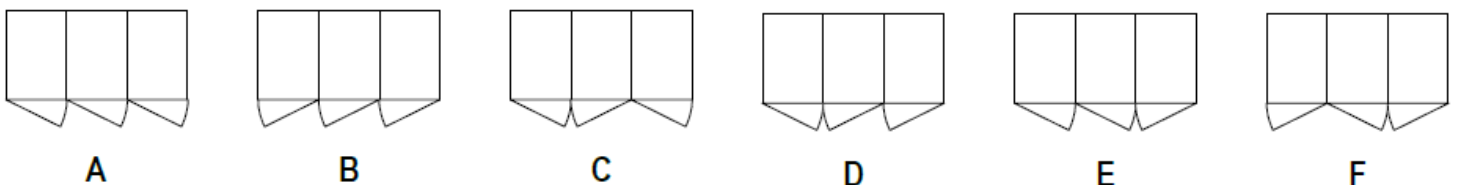


Merchandising	2-Door	3-Door	4-Door	6-Door
Facings (ft. <sup>2</sup> )	23.7	35.2	46.7	69.8
Packout (ft. <sup>3</sup> ) 22" Shelves	42.8	63.6	81.5	121.8
Packout (ft. <sup>3</sup> ) 24" Shelves	46.3	68.8	89.3	133.4
Weight without End Panels	2-Door	3-Door	4-Door	6-Door
RVMC24 Weight (lbs.)	775	933	1,020	1,254
RVMC24RL Weight (lbs.)	775	933	1,020	1,254
Shipping Weight with Solid End Panel <sup>9</sup>	2-Door	3-Door	4-Door	6-Door
RVMC24 Weight (lbs.)	835	993	1,080	1,314
RVMC24RL Weight (lbs.)	835	993	1,080	1,314
Shipping Weight with Solid Windowed End <sup>9</sup>	2-Door	3-Door	4-Door	6-Door
RVMC24 Weight (lbs.)	885	1,043	1,130	1,364
RVMC24RL Weight (lbs.)	885	1,043	1,130	1,364

Notes:

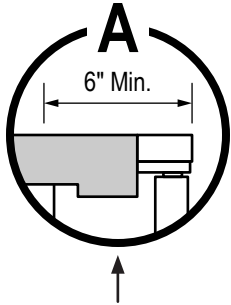
- 9. Each solid end panel: 30 lbs. Each Windowed End: 55 lbs.

FIG. 1: 3-Door Configuration Options

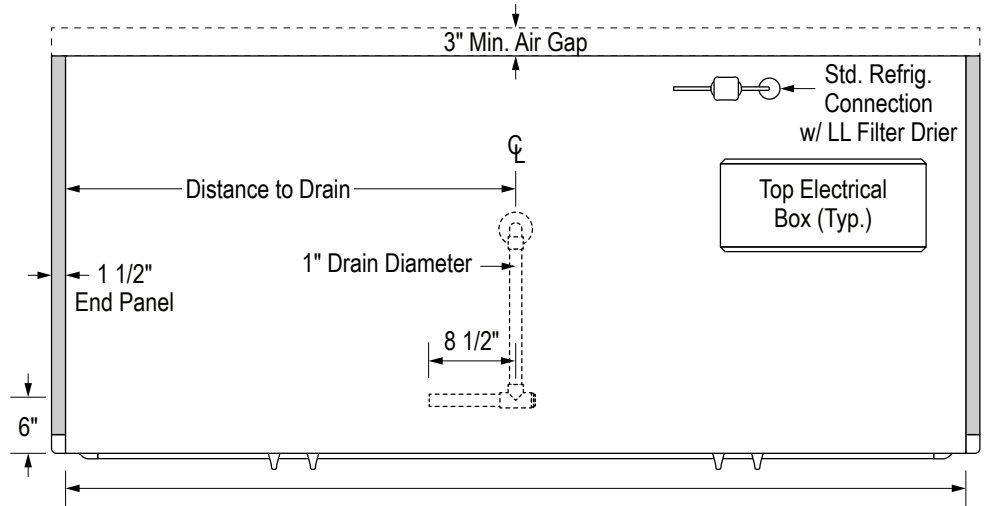




## RVMC24 Top View



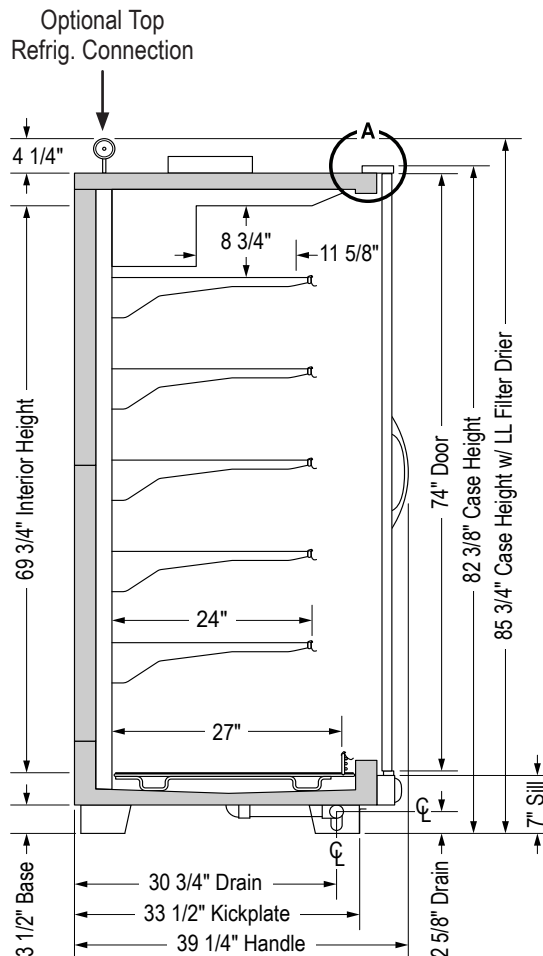
Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.



## Case Dimensions

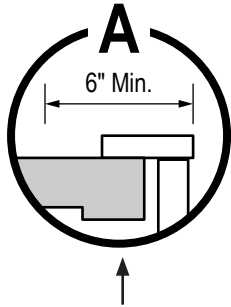
Measurements	2-Door	3-Door	4-Door	6-Door
Case Length (in.) without End Panels	48 3/4	72 1/2	96 3/8	143 7/8
Case Length (in.) with End Panels	53 3/4	77 1/2	101 3/8	148 7/8
Distance to Drain (in.) without End Panels	24 3/8	36 1/4	48 1/8	71 7/8

## RVMC24 End View

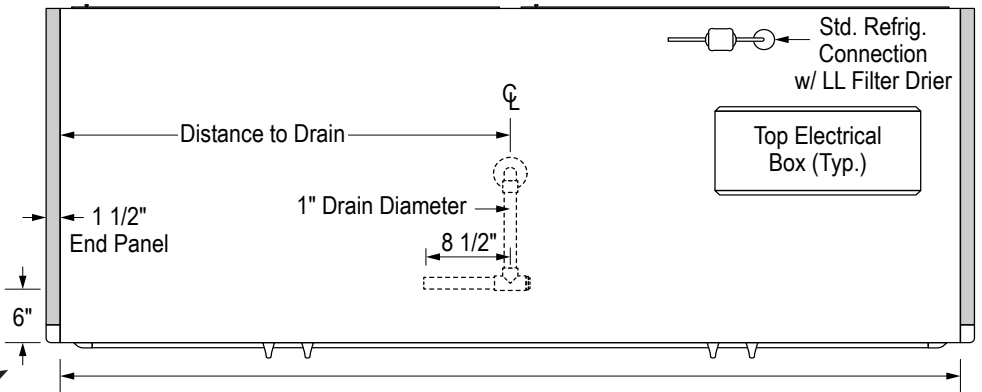




## RVMC24RL Top View



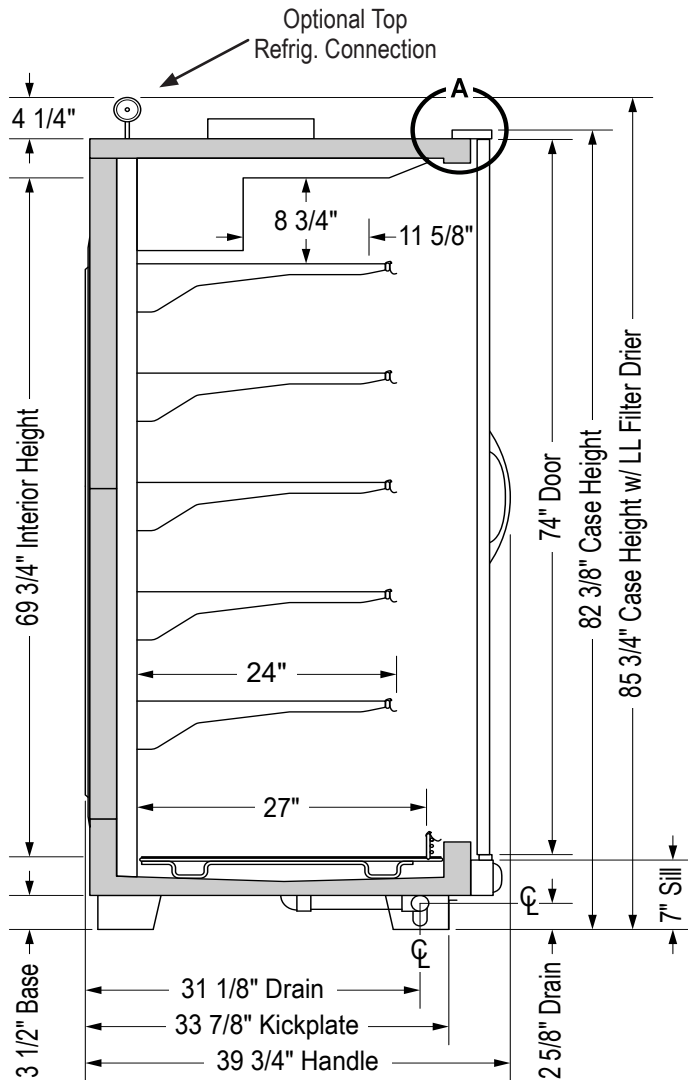
Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.



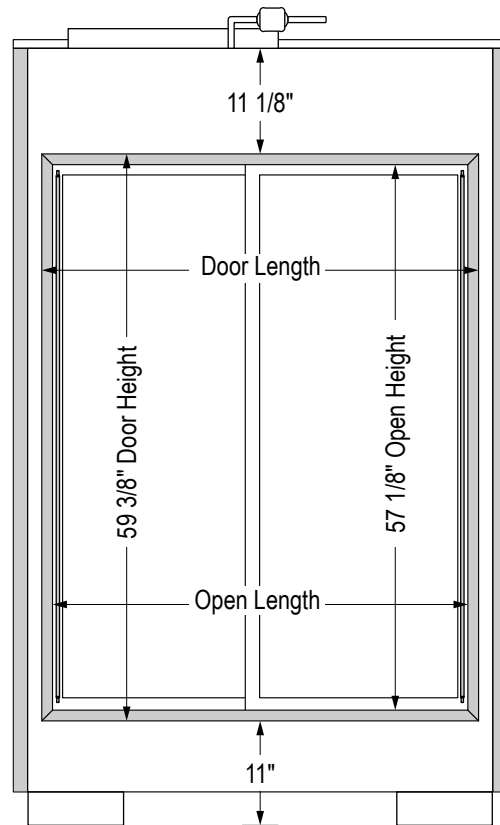
## Case Dimensions

Measurements	2-Door	3-Door	4-Door	6-Door
Case Length (in.) without End Panels	48 3/4	72 1/2	96 3/8	143 7/8
Case Length (in.) with End Panels	53 3/4	77 1/2	101 3/8	148 7/8
Distance to Drain (in.) without End Panels	24 3/8	36 1/4	48 1/8	71 7/8

## RVMC24RL End View



## RVMC24RL Rear View



## Rear Load Dimensions

Measurements	2-Door	3-Door	4-Door	6-Door
Door Length (in.)	45 3/4	69 1/2	93 7/8	141 3/8
Open Length (in.)	43 1/2	67 1/4	91 1/2	139 1/8