



CRYSTAL
merchandiser®

Crystal Merchandiser® RVMC30 Specs

Medium Temp Reach-In Remote Display Cases

2-Door, 3-Door, 4-Door, and 5-Door Cases; Rear Load (RL) Cases

Quick Specs

Energy (Btu/h per Door)*

Standard: 490 at 28°F Evaporator

*when used with parallel rack system

Merchandising (5-Door)

Facings: 74.4 ft²

Packout: 146.8 ft³ with 30" x 24" deep shelves

Features & Options

Go Green

Remote cases ready for CO₂

High Humidity

Control climate challenges with our advanced humidity package

CoolView® Doors

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

LED Lighting

ChillBrite® 3500K or 4000K LED Lighting

Specialty Cases

The Crystal medium temp with 30" doors offer a standard, bottom coil, rear load, deep, and deep rear load style

Hybrid™ Display Case

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

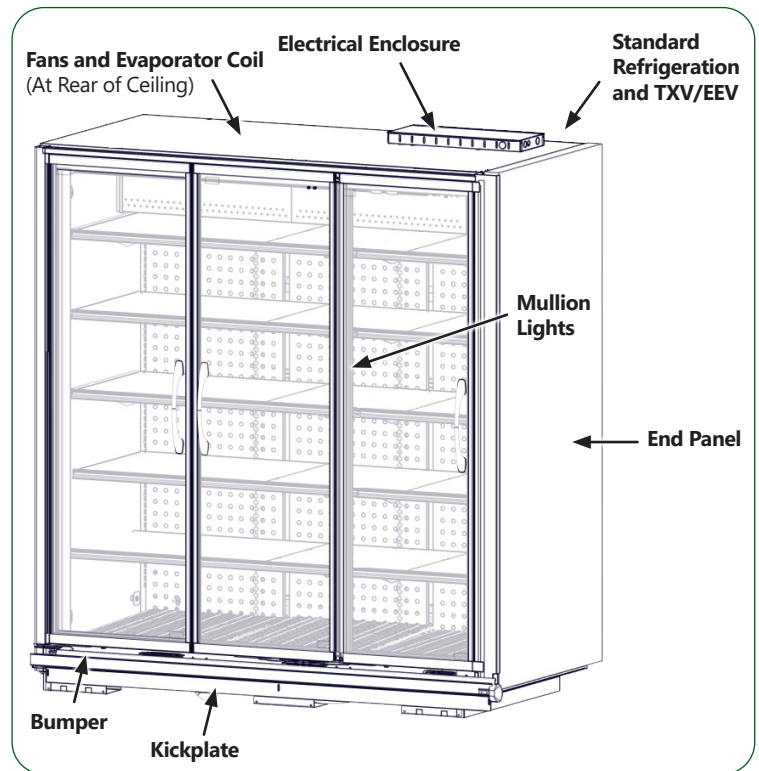
Applications



Dairy



Deli



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



Contact Us:

800-247-4496

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.



SS-05 Rev N • 4/11/2024

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Refrigeration Data ¹



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

Notes:

- Crystal Merchandiser® Rear Load cases must be installed in front of the opening in a walk-in cooler.
- 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 ³	Lineup Data	Individual Case Data (includes 1 pair of end panels)			
	Per Door Avg	2-Door	3-Door	4-Door	5-Door
RVMC30 Baseline Btu/h	490	1,110	1,570	2,050	2,560
RVMC30RL Baseline Btu/h	490	1,110	1,570	2,050	2,560
Energy Use with Condensing Unit ³	Per Door Avg	2-Door	3-Door	4-Door	5-Door
RVMC30 Baseline Btu/h	530	1,200	1,695	2,215	2,765
RVMC30RL Baseline Btu/h	530	1,200	1,695	2,215	2,765
Btu/h Adders	Per Door Avg	2-Door	3-Door	4-Door	5-Door
Rail Heated Doors (Zero Zone CoolView® Ultra®)	+10	+20	+30	+40	+50
Rail & Glass Heated Doors (Zero Zone CoolView® Ultra®)	+40	+80	+120	+160	+200
End Panels	Btu/h Per Case				
Glass Windowed End Panel (1-Pair) ⁴	+410				

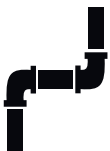
Notes:

- 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.
- Glass windowed end panels only available with 2 1/2" end panels.

Glycol Data ⁵	2-Door	3-Door	4-Door	5-Door
Flow Rate (GPM)	0.8	1.0	1.4	1.8
Pressure Drop (PSIG)	3.1	4.3	7.2	5.8

Notes:

- 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 ⁶	Outlet Size (in.)			
	2-Door	3-Door	4-Door	5-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 ₂ ⁶	2-Door	3-Door	4-Door	5-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:

- Read the Installation & Operation Manual for more about refrigeration piping to properly size individual risers for circuits of more than one case.



Electrical & Energy Data ⁷



Fan Motors (115V)	Per Door Avg		2-Door		3-Door		4-Door		5-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	9	0.84	18	0.84	19	.84	19	1.26	31
Lighting System (120V)	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
LED Lighting	0.16	19	0.32	39	0.48	58	0.63	77	0.79	96
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®) ⁸	0.05	6	0.10	12	0.16	18	0.21	24	0.26	30
Rail & Glass Heated Doors (Zero Zone CoolView® Ultra®) ⁸	0.18	21	0.37	42	0.55	63	0.73	84	0.91	105

Notes:

7. Amps are based on electrical nameplate values. Watts are based on laboratory observations of actual energy use.

8. High-humidity package includes in glass heat, rail heat, and mullion heat.

Physical Data



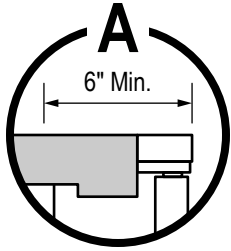
Merchandising	2-Door	3-Door	4-Door	5-Door
Facings (ft. ²)	30.1	44.9	59.7	74.4
Packout (ft. ³) 22" Shelves	55.2	82.3	109.3	136.4
Packout (ft. ³) 24" Shelves	59.3	88.5	117.6	146.8
Shipping Weight without End Panels	2-Door	3-Door	4-Door	5-Door
RVMC30 Weight (lbs.)	903	1,020	1,137	1,254
RVMC30RL Weight (lbs.)	903	1,020	1,137	1,254
Shipping Weight with Solid End Panels ⁹	2-Door	3-Door	4-Door	5-Door
RVMC30 Weight (lbs.)	963	1,080	1,197	1,314
RVMC30RL Weight (lbs.)	963	1,080	1,197	1,314
Shipping Weight with Windowed End ⁹	2-Door	3-Door	4-Door	5-Door
RVMC30 Weight (lbs.)	1,013	1,130	1,247	1,364
RVMC30RL Weight (lbs.)	1,013	1,130	1,247	1,364

Notes:

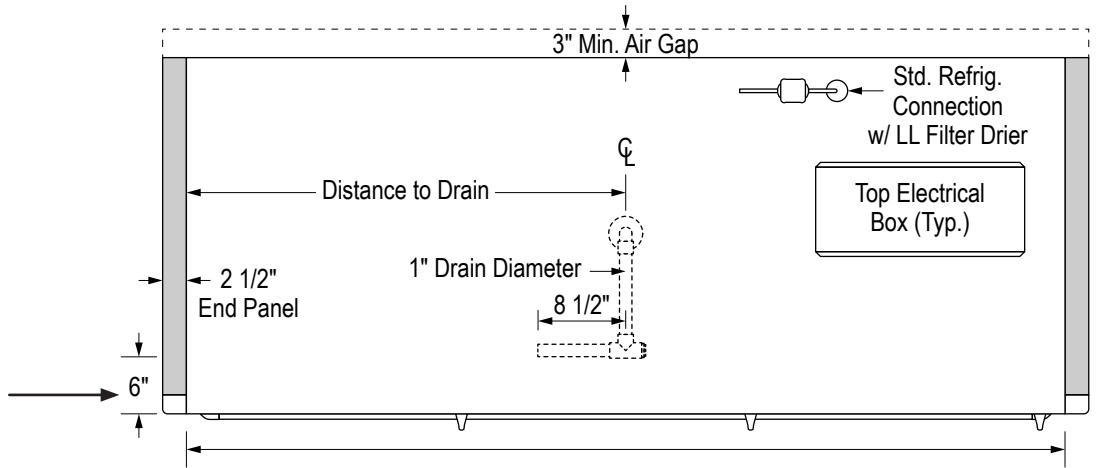
9. Each solid end panel: 30 lbs. Each windowed end panel: 55 lbs.



RVMC30 Top View



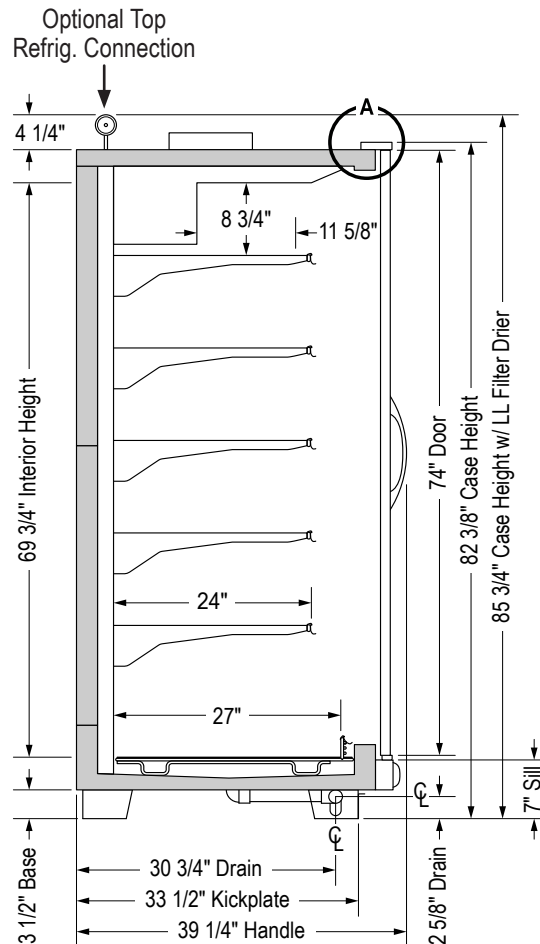
Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.



Case Dimensions

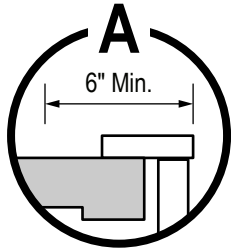
Measurements	2-Door	3-Door	4-Door	5-Door
Case Length (in.) without End Panels	62 1/8	92 1/2	123	153 3/8
Case Length (in.) with End Panels	67 1/8	97 1/2	128	158 3/8
Distance to Drain (in.) without End Panels	31	46 1/4	61 1/2	76 3/4

RVMC30 End View

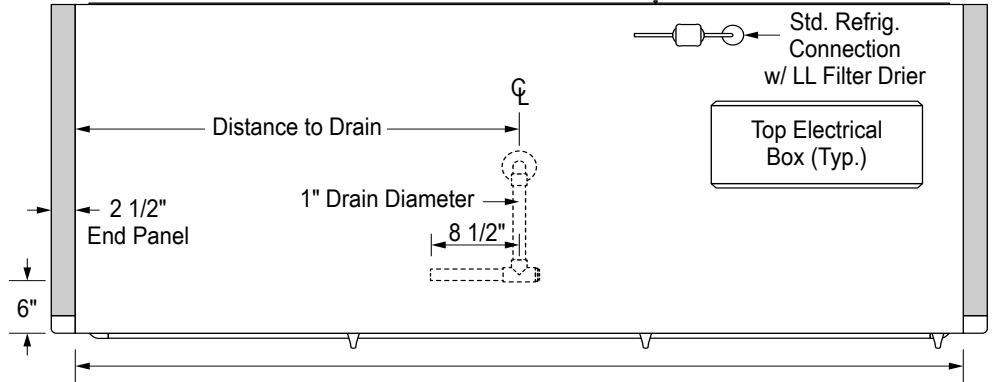




RVMC30RL Top View



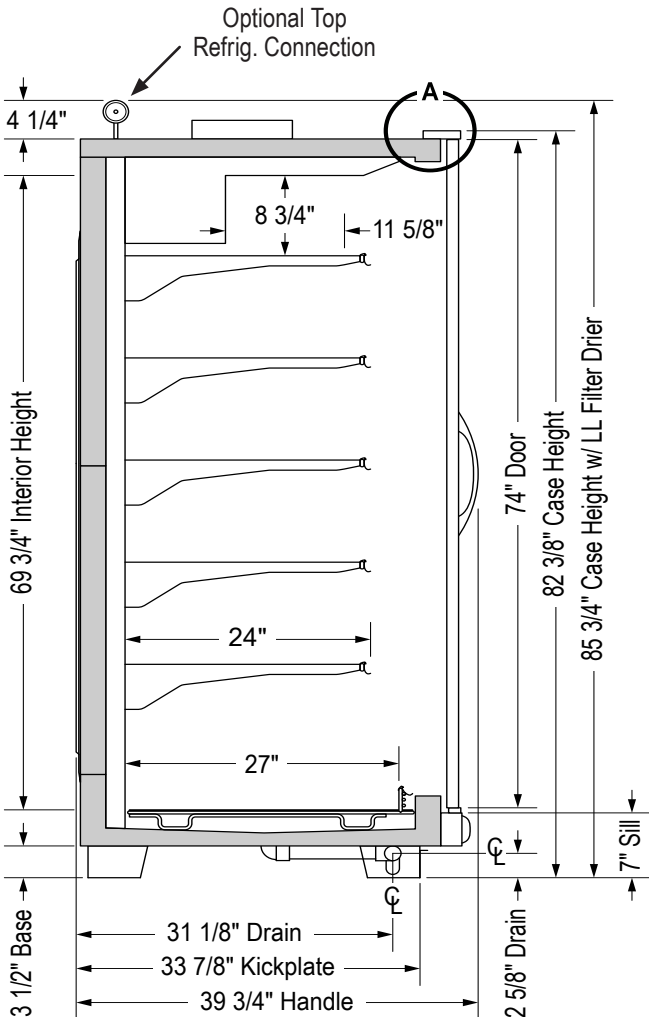
Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.



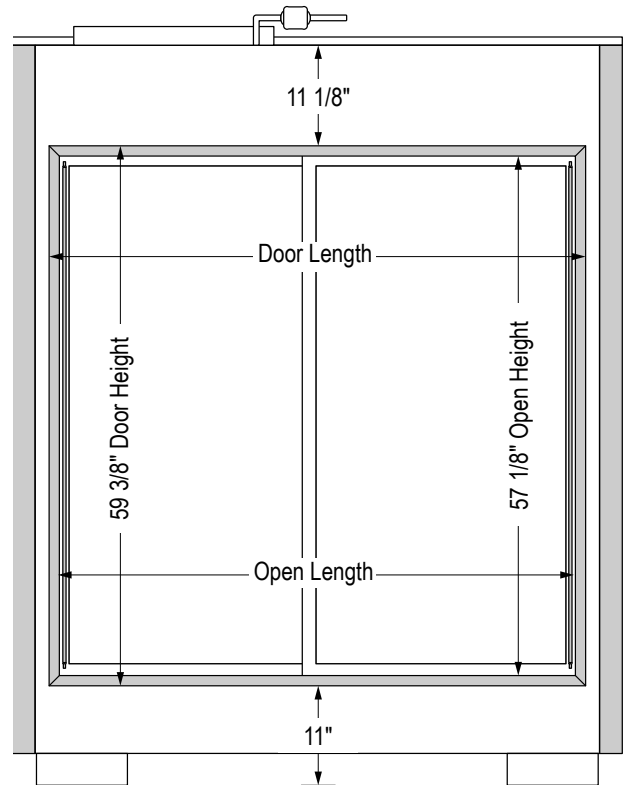
Case Dimensions

Measurements	2-Door	3-Door	4-Door	5-Door
Case Length (in.) without End Panels	62 1/8	92 1/2	123	153 3/8
Case Length (in.) with End Panels	67 1/8	97 1/2	128	158 3/8
Distance to Drain (in.) without End Panels	31	46 1/4	61 1/2	76 3/4

RVMC30RL End View



RVMC30RL Back View



Rear Load Dimensions

Measurements	2-Door	3-Door	4-Door	6-Door
Door Length (in.)	59	89 5/8	120 1/2	151
Open Length (in.)	56 3/4	87 3/8	118 1/8	148 5/8