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 CO_2

High Humidity
Control climate challenges with our advanced humidity package

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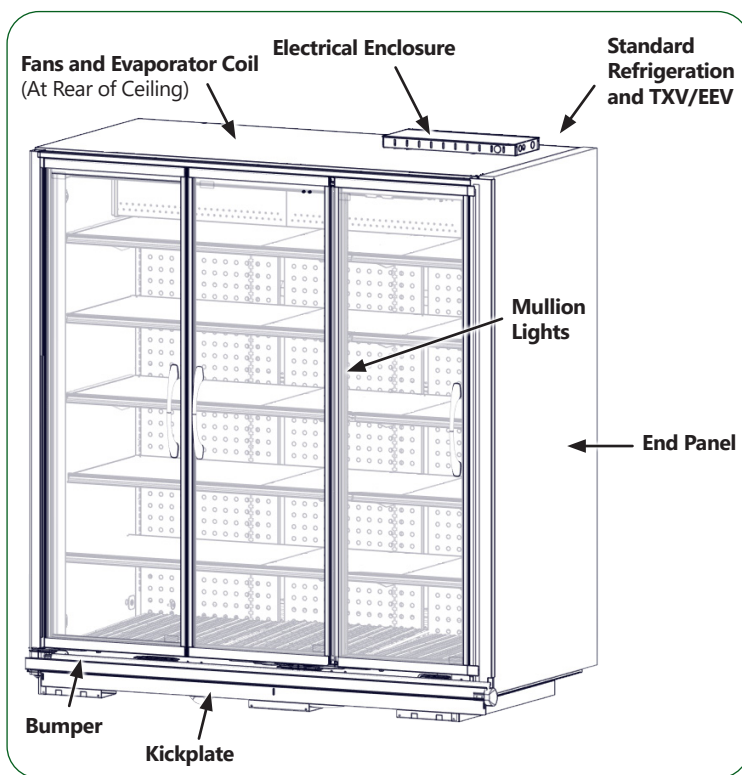30" wide x 74" tall CoolView® Ultra® Doors

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

Beverage   Dairy   Produce   Meat

Fans and Evaporator Coil (At Rear of Ceiling)
Electrical Enclosure
Standard Refrigeration and TXV/EEV
Mullion Lights
End Panel
Bumper
Kickplate

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.

Refrigeration Data [1]
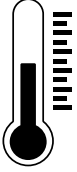
Set Points	°F
Evaporator Temperature [2]	28
Discharge Air Temperature (w/ 8°F Superheat)	33

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.

|	Lineup Data	Individual Case Data (includes 1 pair of end panels)			
Energy Use with Parallel Rack System [3]	**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:
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 [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:
5. All Glycol data based on 35% propylene glycol by weight, 20°F supply temperature, and 23°-24°F outlet temperature.
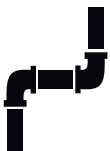
	Outlet Size (in.)			
Refrigeration Piping: R-404A & R-448A [6]	**2-Door**	**3-Door**	**4-Door**	**5-Door**
Suction Line O.D. (Top Refrigeration Exit)	1/2	1/2	1/2	1/2
Liquid Line O.D.	3/8	3/8	3/8	3/8
Refrigeration Piping: CO_2 [6]	**2-Door**	**3-Door**	**4-Door**	**5-Door**
Suction Line O.D. (Top Refrigeration Exit)	3/8	3/8	3/8	3/8
Liquid Line O.D.	3/8	3/8	3/8	3/8

Notes:
6. 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

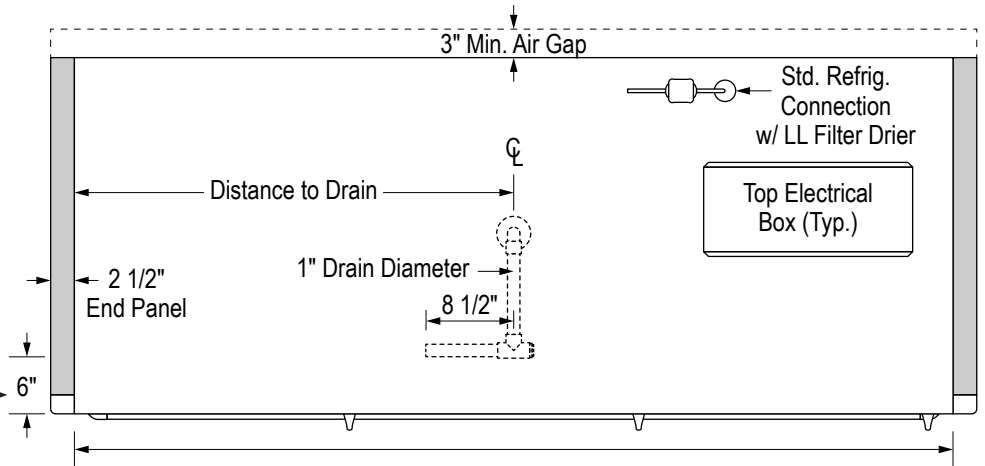| Merchandising	2-Door	3-Door	4-Door	5-Door
Facings (ft.²)	30.1	44.9	59.7	74.4
Packout (ft.³) 22" Shelves	55.2	82.3	109.3	136.4
Packout (ft.³) 24" Shelves	59.3	88.5	117.6	146.8
Shipping Weight without End Panels	**2-Door**	**3-Door**	**4-Door**	**5-Door**
RVMC30 Weight (lbs.)	903	1,020	1,137	1,254
RVMC30RL 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
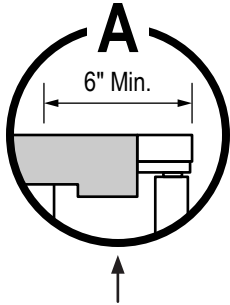
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6" Min.

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.

3" Min. Air Gap

Std. Refrig. Connection w/ LL Filter Drier

Top Electrical Box (Typ.)

Distance to Drain

2 1/2" End Panel

1" Drain Diameter

8 1/2"

6"

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

Optional Top Refrig. Connection

4 1/4"

8 3/4"

11 5/8"

A

69 3/4" Interior Height

74" Door

82 3/8" Case Height

85 3/4" Case Height w/ LL Filter Drier

24"

27"

7" Sill

3 1/2" Base

30 3/4" Drain

33 1/2" Kickplate

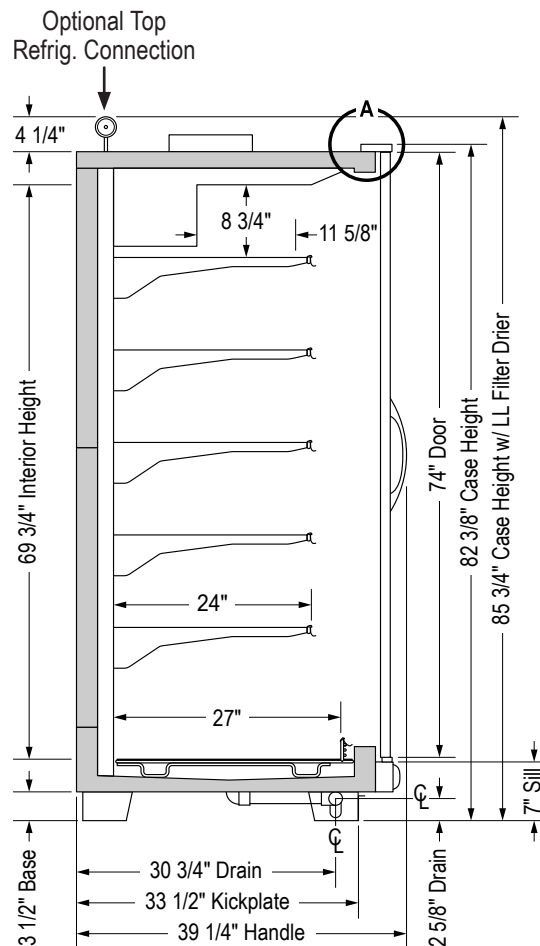39 1/4" Handle

2 5/8" Drain

RVMC30RL Top View

A

6" Min.

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.
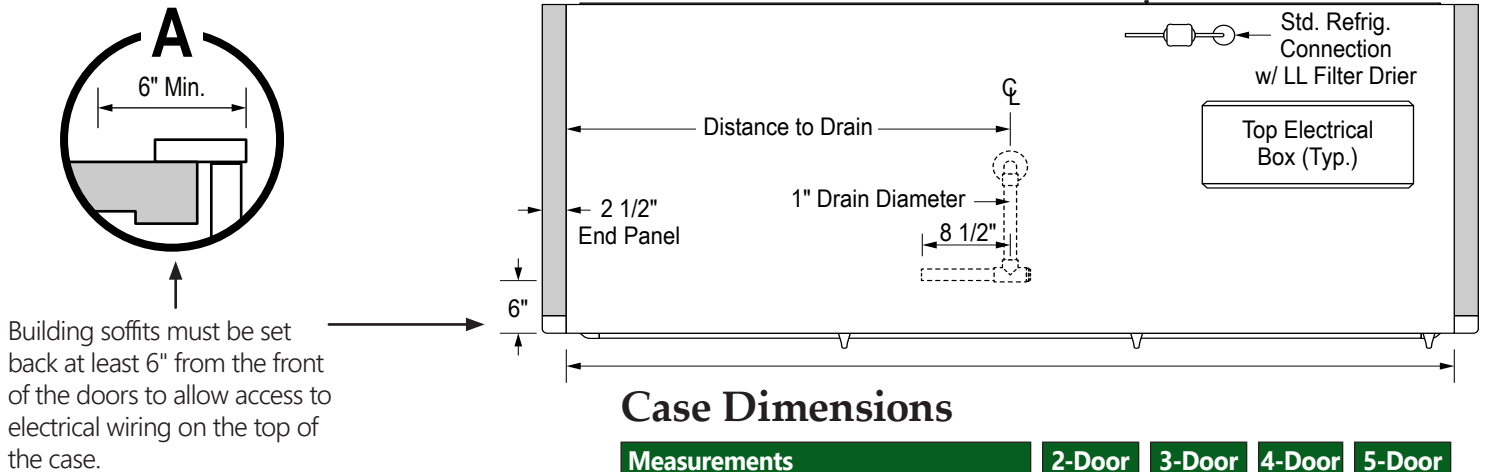
Std. Refrig. Connection w/ LL Filter Drier

Top Electrical Box (Typ.)

Distance to Drain

2 1/2" End Panel

1" Drain Diameter

8 1/2"

6"

Case Dimensions

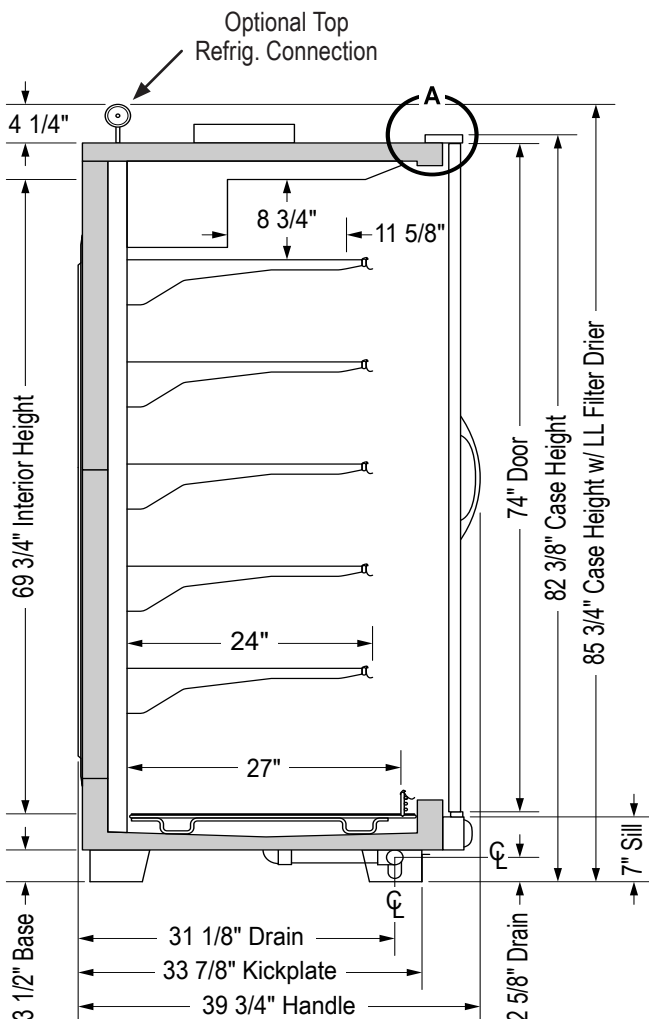| Measurements	2-Door	3-Door	4-Door	5-Door
Case Length (in.) without End Panels	62 1/8	92 1/2	123	153 3/8
Case Length (in.) with End Panels	67 1/8	97 1/2	128	158 3/8
Distance to Drain (in.) without End Panels	31	46 1/4	61 1/2	76 3/4

RVMC30RL End View

Optional Top Refrig. Connection

4 1/4"

8 3/4"

11 5/8"

69 3/4" Interior Height

74" Door

82 3/8" Case Height

85 3/4" Case Height w/ LL Filter Drier

24"

27"

7" Sill

3 1/2" Base

31 1/8" Drain

33 7/8" Kickplate

39 3/4" Handle

2 5/8" Drain

RVMC30RL Back View

11 1/8"

Door Length

59 3/8" Door Height

57 1/8" Open Height

Open Length

11"
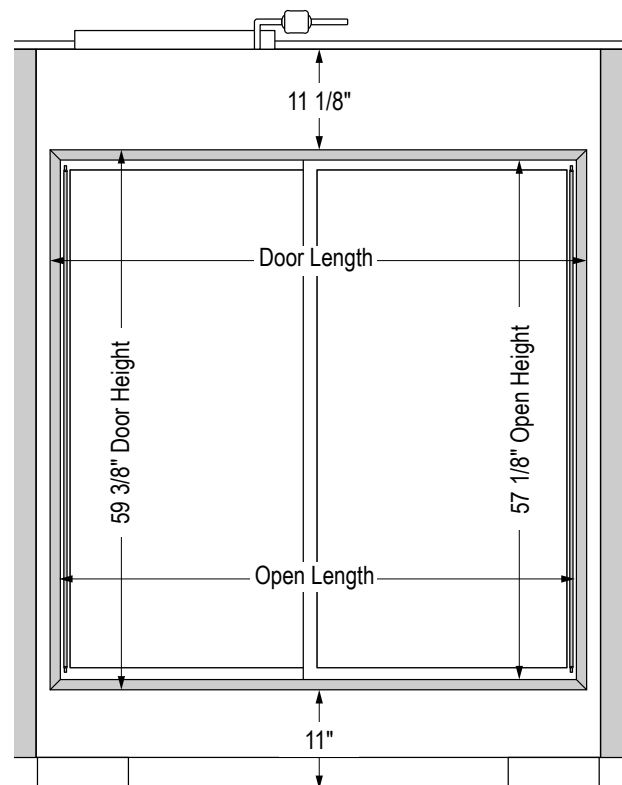
Rear Load Dimensions

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