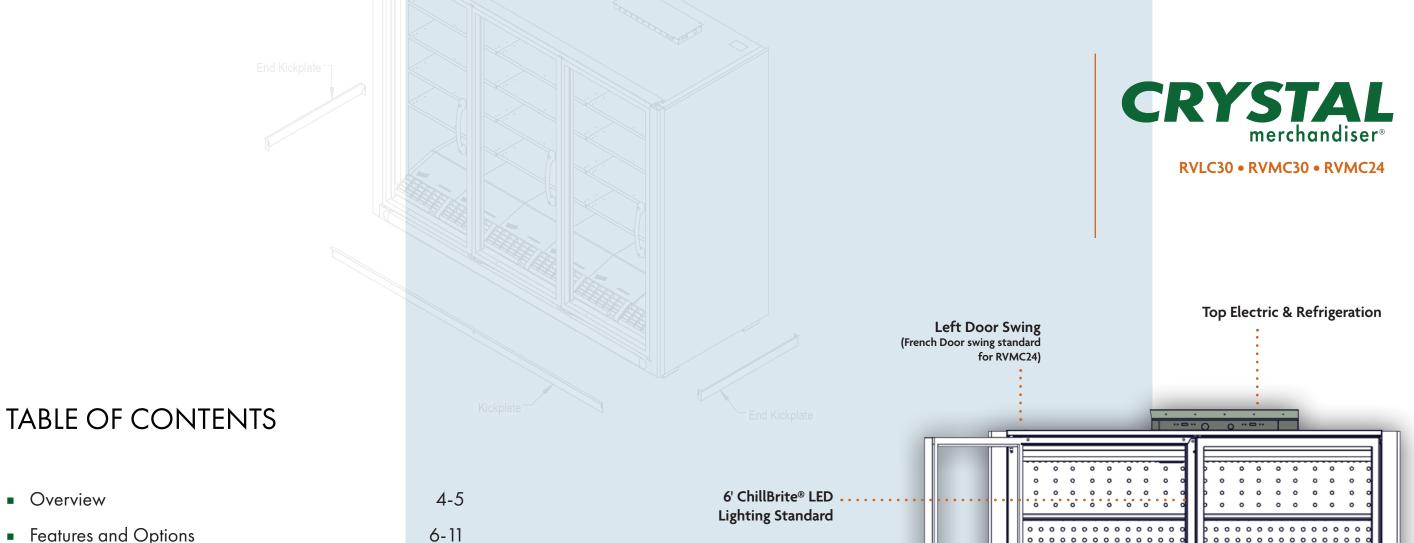


CRYSTAL

merchandiser®



Product Catalog



Overview

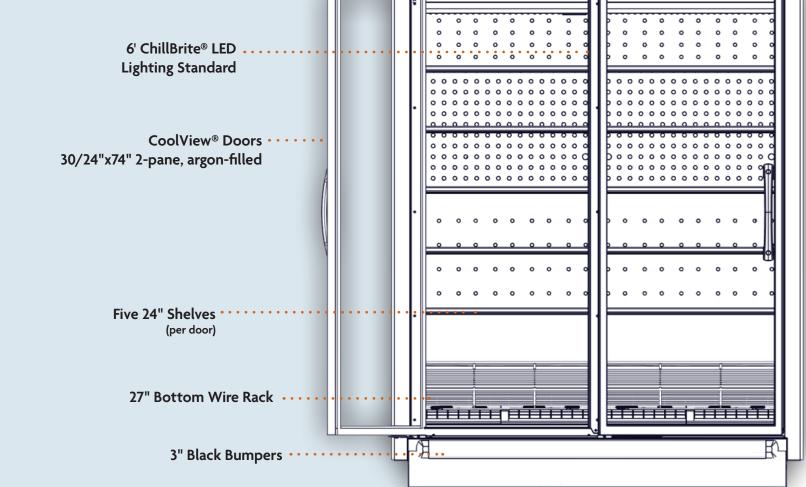
Features and Options

12-13

14-15

16-52

- Applications
- Nomenclature
- Spec Sheets



2RVLC30

CRYSTAL merchandiser®

When it comes to energy efficiency, ease of installation, adaptability to space and product, and display capabilities, our line of Crystal Merchandiser® Reach-In Coolers and Freezers are second to none.

ENERGY CHOICE

Crystal freezers use on average 15% less energy than our competition and upwards of 40% on our coolers.

AIRFLOW

Counter-flow coil design leading to higher energy efficiency

INTEGRITY

The internal reinforced steel end frame ensures superiors structural integrity in Crystal cases.

PACKOUT & FACINGS

Crystal freezers have 4 more square feet of product facings than the leading competitor

FORKLIFTABLE

Forkliftable from either side of the case, our reinforced bottom assembly features steel forklift plates, saving time from unloading the case and streamlining the installation process.





INSULATION

Zero Zone cases boast the thickest insulation in the industry with 2.5" panels. Our insulation boosts energy efficiency and maintains stable product temperatures.

DOORS

CoolView® 74" glass doors with near panoramic views inside, Field reversible, French door, rear load.

HANDLES

CoolArc® Crescent handles in black or satin silver.

LIGHTING

ChillBrite® custom-designed LED lights with minimal dot and equal dispersion.

NATURAL SOLUTION

Genesys® Natural refrigerant solutions available in CO2.

INSTALLATION FRIENDLY

Known in the industry for easy installation and low maintenance, the Zero Zone legacy lives on with the Crystal Merchandiser® - always NSF, DOE, and UL compliant and the enduring quality you expect.



Features and Options

	Ice Cream Ice Merchandiser	Dairy/DeliFloral • MeatProduce
No. of doors	2-5	2-5
Door Width	30"	30"
Door Height	74"	74"
Rear Load	×	•
Back-to-Back	⊘	×
Ultra Narrow	×	×
Back-to-Back Ultra Narrow	×	×
Dual Temp	②	•
Deep	×	•
Deep Rear Load	×	•
Ice Merchandiser	O	8
High Humidity	②	②

RVLC30

Frozen

RVMC30

• Beverage

RVMC24

• Beverage

Dairy/DeliFloral • MeatProduce

2-6

24"

74"

8

8



STANDARD: basic features & normal lead times

Characteristics

Optional: additional features available & normal lead times Special: custom features & increased lead time .

RVMC30

RVMC24

1 Interior Color

Black	STANDARD	STANDARD	STANDARD
White	Optional	Optional	Optional
Brushed Stainless Steel	Special	Special	Special
Black Electrocoating*	Special	Special	Special
White Electrocoating*	Special	Special	Special

RVLC30

*recommended for Seafood & Red Meat

8 Bumpers

3" Black McCue Individual	STANDARD	STANDARD	STANDARD
3" Black McCue Continuous		Optional	
3" Individual (McCue Color Pallete)	Special	Special	Special
3" Continuous (McCue Color Pallette)		Special	

Shelving

30" x 24" Solid Universal Black (2-position)	STANDARD	STANDARD	
48" x 22" Solid (2-position)			STANDARD

O Price Tag Molding

Black PVC per Shelf & Rack	STANDARD	STANDARD	STANDARD
White PVC per Shelf & Rack	Special	Special	Special
Aluminum Reversible	Optional	Optional	Optional
Black Anodized	Optional	Optional	Optional

6 Bottom Wire Rack

24 3/4" Reversible w/ 4" Front Black	STANDARD	STANDARD	
24 3/4" Reversible w/ 4" Front White	Special	Special	
Aluminum Reversible	Optional	Optional	Optional
Black Anodized	Optional	Optional	Optional
27" w/ 2 1/2" Front Black			STANDARD
27" w/ 2 1/2" Front White			Special



Doors

Exterior

3 Door Type

CoolView® Illusion® Black	STANDARD	Special	
CoolView® Illusion® Satin Silver	Optional		
CoolView® Ultra™ Black		STANDARD	STANDARD
CoolView® Ultra™ Satin Silver		Optional	Optional

RVMC30

RVMC24

RVLC30

10 Door Handle

CoolArc™ Black	STANDARD	STANDARD	STANDARD
CoolArc™ Satin Silver	Optional	Optional	Optional

8 Door Swing

French			STANDARD
Left Handle on Right	STANDARD	STANDARD	Optional
Right Handle on Left	Optional	Optional	Optional

Available Add-Ons:

Door Locks

Anti-Fog Coating (Low-Temp Only)

9 Exterior Color

Black ZZ-000	STANDARD	STANDARD	STANDARD
See Color Chart for 36 optional colors	Optional	Optional	Optional
Stainless Steel	Special	Special	Special

10 Bumper

3" Black McCue Individual	STANDARD	STANDARD	STANDARD
3" Black McCue Continuous		Optional	
3" Individual (McCue Color Pallete)	Special	Special	Special
3" Continuous (McCue Color Pallete)		Special	

Wickplates

Black	STANDARD	STANDARD	STANDARD
Louvered Black	Optional	Optional	Optional
Stainless Steel	Special	Special	Special
Louvered Stainless Steel	Special	Special	Special

Temperature Sensors

CPC Green Temp	STANDARD	STANDARD	STANDARD
Carel Temp	Optional	Optional	Optional
Danfoss Temp	Optional	Optional	Optional
ECI Temp			Optional

RVLC30

If you do not see an option available that supports your needs, please reach out to your Zero Zone sales representative to find a solution.

RVMC30

RVMC24

Defrost Sensors

Controls

CPC Orange Defrost	STANDARD	Optional	Optional
--------------------	----------	----------	----------

Available Add-Ons:

- Adjustable Defrost Control
- Adjustable Temp Control (Low-Temp only)
- Control Scheme Packages
- Electronic Defrost Controller

Hybrid Models



Zero Zone HybridTM Display
Cases seamlessly blend the
benefits of self-contained
display cases with the selling
power and reliability of
supermarket cases. These
cases, equipped with an easyto-install modular top-mount
refrigeration kit, offer superior
durability and flexibility.

Available on all Crystal

Merchandiser cases excluding

Rear Load applications.



RVLC30 RVMC30 RVMC24

Refrigeration Connection

ROTB (Refrigeration Out Top Back)	STANDARD	STANDARD	STANDARD
Inside Case Bottom	Optional	Optional	
Hot Gas (Inside Case Bottom)	Optional		
ROTR (Refrigeration Out Top Right)	Optional		
Refrigeration to Bottom Inside		Optional	Optional
ROR (Refrigeration Out Rear)	Special		
Pre-Piping/Common Risers (Contact ZZ Sales)	Special	Special	Special

Expansion Valve

Mechanical	STANDARD	STANDARD	STANDARD
Electronic	Optional	Optional	Optional
Specific Brand (Contact ZZ Sales)	Special	Special	Special

Defrost Type

Electric (Single-Phase)	STANDARD		
Off Cycle	Optional	STANDARD	STANDARD
Electric (3-Phase)	Optional		
Hot Gas	Optional		

Liquid Line Shut Off

Liquid Line Hand Valve	STANDARD	STANDARD	STANDARD
Liquid Line Ball Valve	Optional	Optional	Optional
Specific Brand (Contact ZZ Sales)	Special	Special	Special

Heat Exchanger

No	Optional	STANDARD	STANDARD
Yes - Liquid to Suction	Optional		

Available Add-Ons:

- Filter and/or Drier
- Solenoid Valve Liquid Line

Electrical

Electrical Service

115V - 1PH - 60HZ	Optional	STANDARD	STANDARD
115/208V - 1PH - 60HZ	STANDARD	Hybrid	Hybrid
208V - 3PH -60HZ	Special		

RVMC30

RVLC30

RVMC24

Electrical Connection

EOT (Electric Out Top)	STANDARD	STANDARD	STANDARD
ETB (Electric To Bottom)	Optional	Optional	Optional
EOB (Electric Out Back)	Optional	Optional	Optional

Seismic Restraints

CPC ACCII (w/ Master &

No Term. Block)

Yes - Seismic	Optional	Optional	Optional	
Low VoC Caulk				
Yes - VOC Caulk	Optional	Optional	Optional	
Motion Sensors				
Case Control 20% Dimming	Optional	Optional	Optional	
Anti-Sweat Controls				
CPC ACCII (w/ Master & Modbus Term. Block)	Optional			

Optional



THE

CRYSTAL merchandiser®

RVLC30 • RVMC30 • RVMC24

Built in the USA, these innovative display cases maximize the energy efficiency of a closed-door case with the visual display power of open multi-decks. Using industry leading lighting technology and advanced cooling, Crystal Merchandiser reach-in coolers reduce energy costs, reduce product shrink, and improve display capabilities to drive more sales



Heavy duty, 4-Position, angled shelf options. Capable of supporting 350lbs

LIGHTING

Custom color temperatures available in 3500K and 4000K

TEMPERATURE

Dual temp case options provides maximum versatility.

AESTHETICS

Contrast between black interior and colorful product packagaing that creates appealing visuals to the customer.



DAIRY

 The rear loading capability allows you to restock your products without interrupting your shoppers' experience.

DELI



 With 35% more facing, it is easier to see and identify the product helping boost sales and eliminate confusion.

BEVERAGE



Deep Crystal Merchandiser® display cases with 30" wide doors can fit 4–30 rack cases of beer in-line.

PRODUCE



 Keeping produce behind glass prevents shrinkage up to 50% and ensures it stays fresh

FRESH MEAT



 Top Coil to give this display case a maximum packout of 167.5 f³ with 27" shelves. These heavyduty shelves can hold up to 250 lbs.

FREEZER



 The Coolview® Illusion® doors reach all the way to the edge, letting all your products to be seen.





NOMENCLATURE

is a versatile display case. Its applications include floral displays, produce, dairy, deli, wine, beverages, ice cream, and frozen foods. The deep display cases have a maximum packout of 167.5 f³, and the shelves can hold up to 250 lbs. The CoolView® doors maximize visibility and are nearly invisible, focusing attention on your product.

8RVMC 30D-B

4

5)

Number of Doors 1, 2, 3, 4, 5, 6 Type of Case
R = Reach-In/Remote
V = Crystal Merchandiser®
M/L – Medium or Low Temp
C – Cantilever Shelving

2

(3) Door Width in Inches

24 = 24" French Doors 30 = 30" Standard Swing

(4) Special

BB = Back-to-Back D = Deep

DT = Dual Temp RL = Rear Load UN = Ultra Narrow
BBUN = Back-to-Back

Ultra Narrow

DRL = Deep Rear Load

IM = Ice Merchandiser

M = Meat **P** = Produce

F = Floral

(5) Applications

B = Beverage

D = Dairy/ Deli



RVMC24UN

RVLC30 Available as
Ice Merchandiser
Back to Back, Dual Temp
RVLC30IM • RVLC30BB • RVLC30DT



RVMC24D-B

RVMC30 Available as

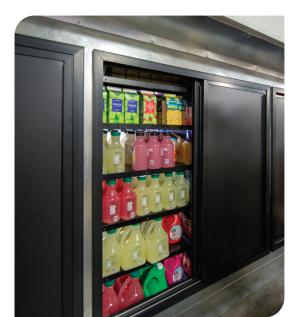
Deep, Rear Load, Deep Rear Load

RVMC30D • RVMC30RL • RVMC30DRL



RVLC30

RVMC24 Available as
Back-to-Back Ultra Narrow, Deep, Rear
Load, Deep Rear Load, Ultra Narrow
RVMC24BBUN • RVMC24D • RVMC24RL •
RVMC24DRL • RVMC24UN



RVMC30RL

Hybrid Available as
RVLC30, RVMC30, RVMC24
RVMC24D • RVMC30D





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

Crystal Merchandiser® RVMC30 Specs

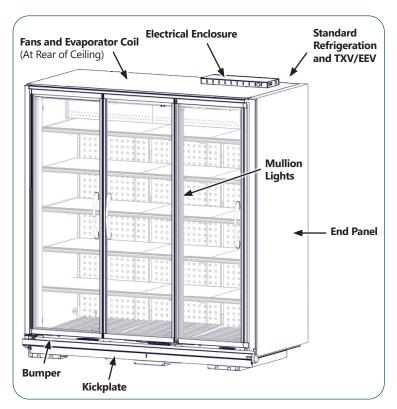
Medium Temp Reach-In Remote Display Cases

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

Applications









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

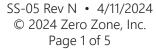


Specifications are subject to change without notice. All dimensions are nominal. Case designed to operate in an ambient temperature of 75°F and relative humidity of 55% or lower.













Crystal Merchandiser® RVMC30 Remote Specs

RVMC30 and RVMC30RL

Refrigeration Data ¹



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

- 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	neup Data Individual Case Data (includes 1 pair of end			
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

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		

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

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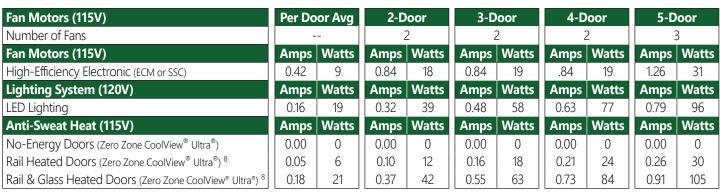




Crystal Merchandiser® RVMC30 Remote Specs

RVMC30 and RVMC30RL

Electrical & Energy Data 7



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



18

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

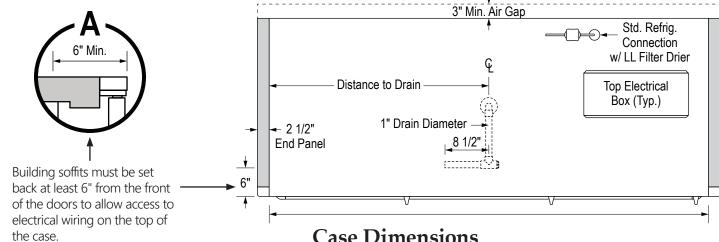
9. Each solid end panel: 30 lbs. Each windowed end panel: 55 lbs.



Crystal Merchandiser® RVMC30 Remote Specs

RVMC30 and RVMC30RL

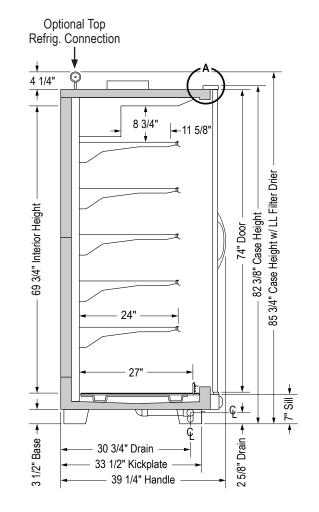
RVMC30 Top View



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



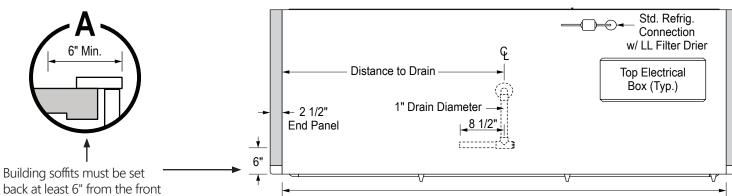
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Crystal Merchandiser® RVMC30 Remote Specs

RVMC30 and RVMC30RL

RVMC30RL Top View

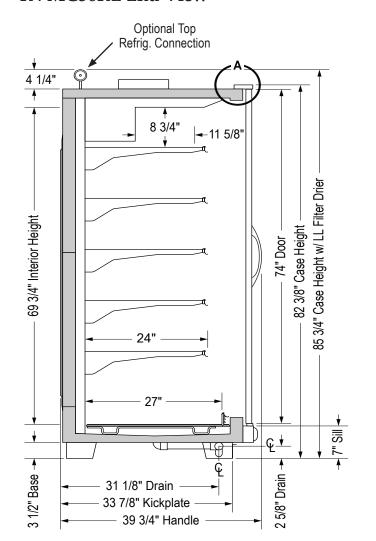


back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.

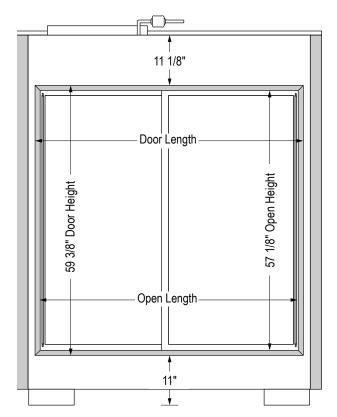
Case Dimensions

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

ZERO ZONE

Crystal Merchandiser® RVMC30D Specs
Medium Temp Deep Reach-In Remote Display Cases

Quick Specs

Energy (Btu/h per Door)*

Standard: 495 at 28°F Evaporator *when used with parallel rack system

Merchandising (5-Door)

Facings: 74.4 ft²

Packout: 167.5 ft³ with 30" x 27" deep shelves

Features & Options

Go Green

Remote cases ready for CO₂ or synthetic refrigerants

High Humidity

Control climate challenges with our advanced humidity package

CoolView® Doors

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

LED Lighting

ChillBrite® 3500K and 4000K LED Lighting

Additional Models

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

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









Fans and Evaporator Coil
(At Rear of Ceiling)

Mullion
Lights

End Panel



Manuals and Instructions: https://www.zero-zone.com/rvmc-rvlc Contact Us:

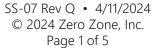
800-247-4496
www.zero-zone.com

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.











20



Crystal Merchandiser® RVMC30D Remote Specs

RVMC30D and RVMC30DRL

Refrigeration Data ¹



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

- 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	ata 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	
RVMC30D Baseline Btu/h	495	1,100	1,570	2,050	2,570	
RVMC30DRL Baseline Btu/h	495	1,100	1,570	2,050	2,570	
Energy Use with Condensing Unit ³	Per Door Avg	2-Door	3-Door	4-Door	5-Door	
RVMC30D Baseline Btu/h	535	1,190	1,695	2,215	2,775	
RVM30DRL Baseline Btu/h	535	1,190	1,695	2,215	2,775	
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), standard-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

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



	Outlet Size (III.)					
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		

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

Outlet Size (in)



Crystal Merchandiser® RVMC30D Remote Specs

RVMC30D and RVMC30DRL

Electrical & Energy Data 7

	Fan Motors (115V)	Per Do	or Avg	2-D	oor	3-D	oor	4-D	oor	5-D	oor
	Number of Fans	_	-		2	2	2	2	2	3	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

- 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	5-Door
Facings (ft. ²)	30.1	44.9	59.7	74.4
Packout (ft.3) 24" Shelves	59.4	88.5	117.6	146.8
Packout (ft. ³) 27" Shelves	67.8	101.0	134.3	167.5
Shipping Weight without End Panels	2-Door	3-Door	4-Door	5-Door
RVMC30D Weight (lbs.)	913	1,034	1,155	1,277
RVMC30DRL Weight (lbs.)	913	1,034	1,155	1,277
Shipping Weight with Solid End Panels 9	2-Door	3-Door	4-Door	5-Door
RVMC30D Weight (lbs.)	973	1,094	1,215	1,337
RVMC30DRL Weight (lbs.)	973	1,094	1,215	1,337
Shipping Weight with Windowed End 9	2-Door	3-Door	4-Door	5-Door
RVMC30D Weight (lbs.)	1,023	1,144	1,265	1,387
RVMC30DRL Weight (lbs.)	1,023	1,144	1,265	1,387

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

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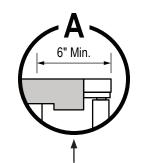
Crystal Merchandiser® RVMC30D Remote Specs

RVMC30D and RVMC30DRL

Crystal Merchandiser® RVMC30D Remote Specs

RVMC30D and RVMC30DRL

RVMC30D 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.

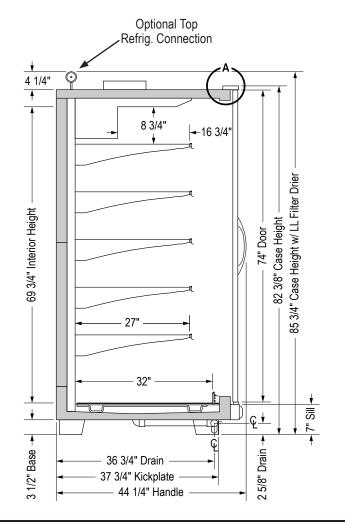
3" Min. Air Gap Std. Refrig. Connection w/ LL Filter Drier -Distance to Drain-Top Electrical Box (Typ.) 1" Drain Diameter **←** 2 1/2" **End Panel**

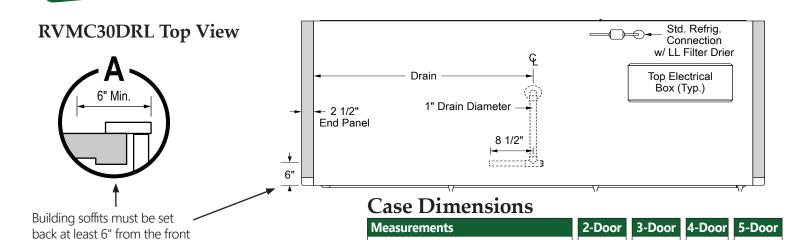
Case Dimensions

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
Drain Dimension (in.)	31	46 1/4	61 1/2	76 3/4

RVMC30D End View

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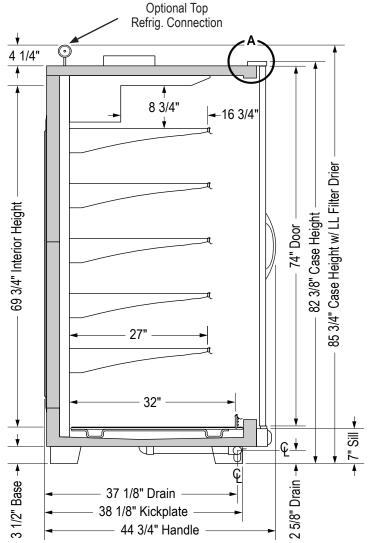


RVMC30DRL End View

of the doors to allow access to

electrical wiring on the top of

the case.

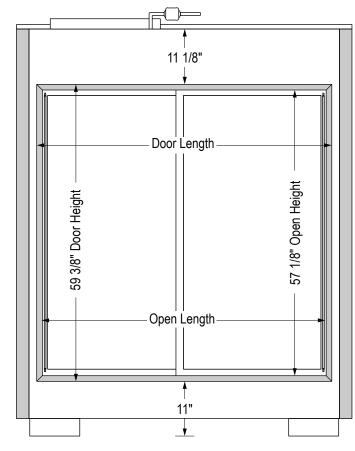


RVMC30RL Rear View

Case Length (in.) without End Panels

Case Length (in.) with End Panels

Drain Dimension (in.)



62 1/8

67 1/8

31

92 1/2

97 1/2

46 1/4

123

128

61 1/2

153 3/8

158 3/8

76 3/4

Rear Load Dimensions

Measurements	2-Door	3-Door	4-Door	5-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

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Crystal Merchandiser® RVMC30BC Specs

Medium Temp Reach-In Remote Display Cases

2-Door, 3-Door, 4-Door, and 5-Door Cases; Bottom Coil

Applications









Quick Specs

Energy (Btu/h per Door)* Standard: 495 at 28°F Evaporator

*when used with parallel rack system

Merchandising (5-Door)

Facings: 70.2 ft²

Packout: 127.1 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

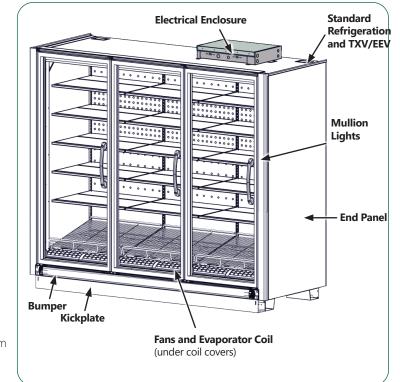
30" wide x 74" tall CoolView® Illusion® Doors

LED Lighting

ChillBrite® 3500K and 4000K LED Lighting

Additional Models

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





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



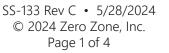
Specifications are subject to change without notice. All dimensions are nominal. Case designed to operate in an ambient temperature of 75°F and relative humidity of 55% or lower.



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NE -

Crystal Merchandiser® RVMC30BC Remote Specs

RVMC30E

Refrigeration Data 1



Set Points	Avg
Evaporator Temperature (°F) ²	28
Discharge Air Temperature (°F) (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
RVMC30BC Baseline Btu/h	495	875	1,445	2,015	2,585
Btu/h Adders	Per Door Avg	2-Door	3-Door	4-Door	5-Door
Rail Heated Doors (Zero Zone CoolView® Illusion®)	+10	+20	+30	+40	+50
Rail & Glass Heated Doors (Zero Zone CoolView® Illusion®)	+40	+80	+120	+160	+200

Notes:

3. Baseline Evaporator Btu/h based on LED lighting (Zero Zone ChillBrite® 4000K), standard-energy doors (Zero Zone CoolView® Illusion®), and ECM or SSC electronic fan motors.

Off-Cycle Defrost	R-404A	R-448A	CO ₂
Time Per Defrost (Minutes)	45	45	45
Drip Time	N/A	N/A	N/A
EPR Settings (PSIG)	52	55	461
Frequency (Per Day)	4	4	4



	Outlet Size (in.)						
Refrigeration Piping: R-404A & R-448A 4	2-Door	3-Door	4-Door	5-Door			
Suction Line O.D. (Top Refrigeration Exit)	1/2	1/2	1/2	1/2			
Suction Line O.D. (Top Refrigeration Exit)	3/8	3/8	1/2	1/2			
Liquid Line O.D.	1/4	1/4	3/8	3/8			
Refrigeration Piping: CO ₂ ⁵	2-Door	3-Door	4-Door	5-Door			
Suction Line O.D. (Top Refrigeration Exit)	3/8	3/8	3/8	3/8			
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:

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

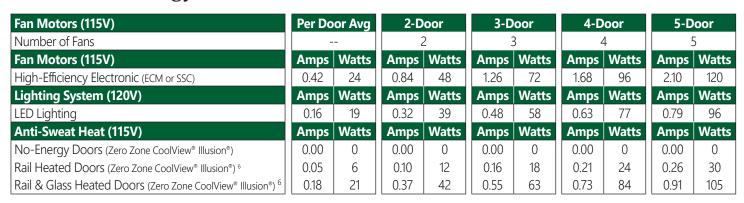
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Crystal Merchandiser® RVMC30BC Remote Specs

RVMC30BC

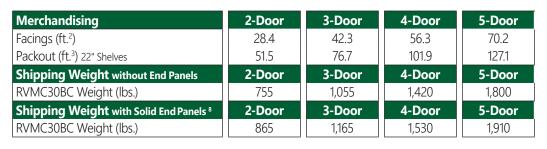
Electrical & Energy Data 5





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

Physical Data



Notes:

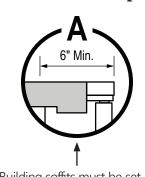
8. Each solid end panel: 55 lbs.



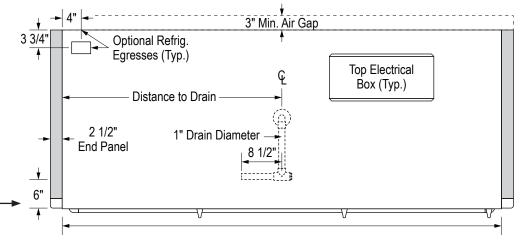
Crystal Merchandiser® RVMC30BC Remote Specs

RVMC30BC





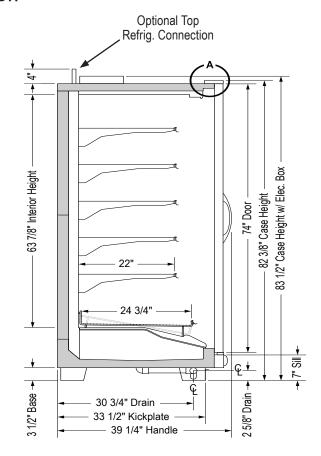
Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.



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

RVMC30BC End View



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Quick Specs

Energy (Btu/h per Door)*

Frozen Food: 925 at -7°F Evaporator Ice Cream: 1,005 at -16°F Evaporator *when used with parallel rack system

Merchandising (5-Door)

Facings: 70.2 ft²

Packout: 136.1 ft³ with 30" x 24" deep shelves

Features & Options

Go Green

Remote cases ready for CO₂

High Humidity

Control climate challenges with advanced humidity package

CoolView® Doors

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

LED Lighting

ChillBrite® 4000K LED Lighting

Save on floor space and energy by choosing a back-to-back case.

Additional Models

The Crystal low temp lineup offers a standard, back-to-back, ice merchandiser, and dual temp case

Hybrid™ Display Case

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



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

Low Temp Reach-In Remote Display Cases

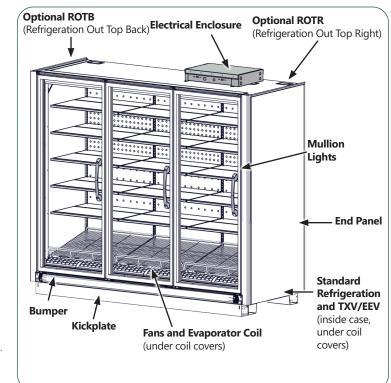
2-Door, 3-Door, 4-Door, and 5-Door Cases; Back-to-Back (BB) Cases

Applications











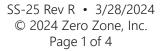
Specifications are subject to change without notice. All dimensions are nominal. Case designed to operate in an ambient temperature of 75°F and relative humidity of 55% or lower.



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Crystal Merchandiser® RVLC30 Remote Specs

Outlet Size (in.)

3/8

3/8

3/8

RVLC30 and RVLC30BB

Refrigeration Data



Set Points	Frozen Food (FF)	Ice Cream (IC)
Evaporator Temperature (°F) 1	-7	-16
Discharge Air Temperature (°F) (w/ 8°F Superheat)	-3	-12

1. For high-glide refrigerants, use dew point for unit sizing. Adjust evaporator pressure as needed to maintain discharge air temperatures.

	Lineu	Lineup Data Individual Case Data (includes 1 pair of				pair of	end pai	neis)		
	Per Do	Per Door Avg 2-Door			3-D	3-Door 4-Door			5-Door	
Energy Use with Parallel Rack System 2	FF	IC	FF	IC	FF	IC	FF	IC	FF	IC
RVLC30 Baseline Btu/h	925	1,005	2,130	2,430	3,280	3,540	4,300	4,640	5,330	5,750
RVLC30BB Baseline Btu/h (Each Side)	850	920	1,980	2,260	3,055	3,285	4,000	4,300	4,955	5,325
Energy Use with Condensing Unit ²	FF	IC	FF	IC	FF	IC	FF	IC	FF	IC
RVLC30 Baseline Btu/h	980	1,065	2,260	2,575	3,475	3,750	4,560	4,920	5,650	6,095
RVLC30BB Baseline Btu/h	900	975	2,100	2,395	3,240	3,480	4,240	4,560	5,250	5,645
Btu/h Adders	FF	IC	FF	IC	FF	IC	FF	IC	FF	IC
Anti-Sweat High-Humidity Package	+100	+100	+200	+200	+300	+300	+400	+400	+500	+500
End Panels	Btu/h F	Per Case								
Glass Windowed End Panel (1-Pair) 3	+315	+350								

- 2. Baseline Evaporator Btu/h based on LED lighting (Zero Zone ChillBrite® 4000K), standard-energy doors (Zero Zone CoolView® Illusion®), and ECM or SSC electronic fan motors.
- 3. Glass windowed end panels only available with 2 1/2" end panels.

	Refrigeration Piping: R-404A & R-448A 4	2-Door	3-Door	4-Door	5-Doo
	Suction Line O.D. (Standard Refrigeration Exit)	7/8	7/8	7/8	7/8
	Suction Line O.D. (Top Refrigeration Exit)	3/8	5/8	5/8	5/8
_ آئ	Liquid Line O.D. (Electric Defrost)	3/8	3/8	3/8	3/8
	Liquid Line O.D. (Hot Gas Defrost)	1/2	1/2	1/2	1/2
	Refrigeration Piping: CO ₂ ⁴	2-Door	3-Door	4-Door	5-Doo
	Suction Line O.D. (Standard Refrigeration Exit)	1/2	1/2	1/2	1/2
	Suction Line O.D. (Top Refrigeration Exit)	1/2	1/2	1/2	1/2

Liquid Line O.D. (Electric Defrost)

Liquid Line O.D. (Hot Gas Defrost)

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

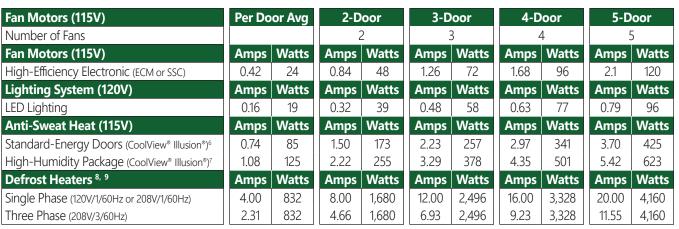
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Crystal Merchandiser® RVLC30 Remote Specs

RVLC30 and RVLC30BB

Electrical & Energy Data 5



Notes:

- 5. Amps are based on electrical nameplate values. Watts are based on laboratory observations of actual energy use.
- 6. Standard doors include glass heat, rail heat, mullion heat, and a deep coil.
- 7. High-humidity package includes 10% increase in glass heat, rail heat, and mullion heat. This package also includes a deep coil and an anti-sweat controller.
- 8. Electric Defrost: 1 per day. Defrost termination temperature setting is 50°F. Failsafe time is 55 minutes. Refer to the Installation & Operation Manual for details.
- 9. Hot Gas Defrost: 1 per day. Defrost termination temperature setting is 65°F. Failsafe time is 30 minutes. Refer to the Installation & Operation Manual for details. Zero Zone recommends 1 riser per refrigeration circuit when utilizing hot gas defrost.

Physical Data

Merchandising	2-Door	3-Door	4-Door	5-Door
Facings (ft. ²)	28.4	42.3	56.3	70.2
Packout (ft.3) 22" Shelves 10	51.5	76.7	101.9	127.1
Packout (ft.3) 24" Shelves 10	55.1	82.1	109.2	136.1
Shipping Weight without End Panels 11	2-Door	3-Door	4-Door	5-Door
RVLC30 Weight (lbs.)	755	1,055	1,420	1,800
RVLC30BB Weight (lbs.)	1,450	2,030	2,740	3,480
Shipping Weight with Solid End Panels 11	2-Door	3-Door	4-Door	5-Door
RVLC30 Weight (lbs.)	815	1,115	1,480	1,860
RVLC30BB Weight (lbs.)	1,570	2,150	2,860	3,600
Shipping Weight with Windowed End 11	2-Door	3-Door	4-Door	5-Door
RVLC30 Weight (lbs.)	865	1,165	1,530	1,910

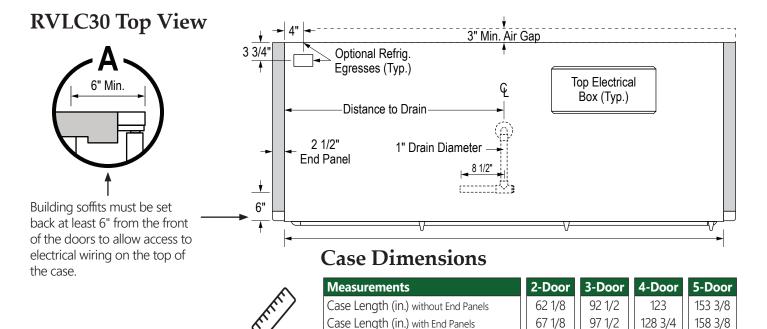
Notes:

- 10. Available with 6" tall bottom baskets instead of bottom wire racks.
- 11. Each solid end panel: 30 lbs for RVLC30 or 60 lbs for RVLC30BB. Each windowed end panel: 55 lbs for RVLC30.

ZERO ZONE

Crystal Merchandiser® RVLC30 Remote Specs

RVLC30 and RVLC30BB



Distance to Drain (in.) without End Panels

RVLC30 End View

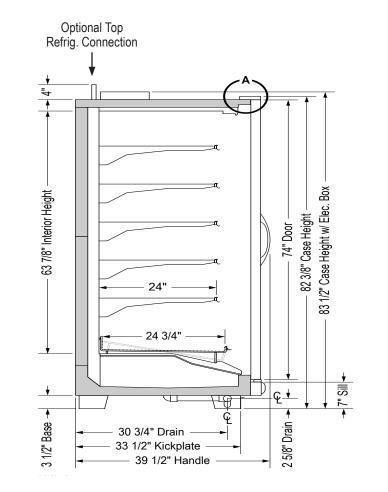
RVLC30BB Back-to-Back End View

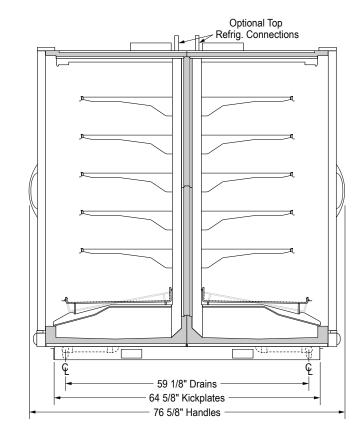
46 1/4

31

61 1/2

76 3/4





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Crystal Merchandiser® RVLC30IM Specs

Low Temp Ice Merchandiser Reach-In Remote Display Cases
2-Door and 3-Door Cases

Applications



Quick Specs

Energy (Btu/h per Door)*

Standard: 910 at 0°F Evaporator *when used with parallel rack system

Merchandising (3-Door)

Facings: 42.3 ft²

Packout: 82.1 ft³ with 30" x 24" deep shelves

Max Packout Weight: 2,460 lbs.

Features & Options

Go Green

Remote cases ready for CO₂

High Humidity

Control climate challenges with our advanced humidity package

CoolView® Doors

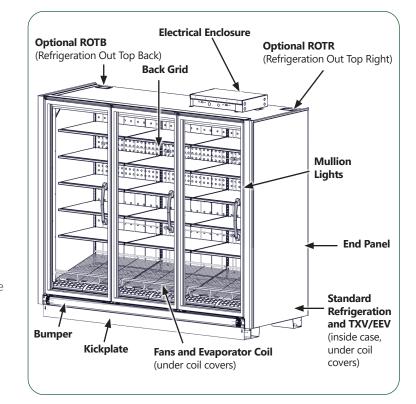
30" wide x 74" tall CoolView® Illusion® Doors

LED Lighting

ChillBrite® 4000K LED Lighting

Additional Models

The Crystal low temp lineup offers a standard, back-to-back, ice merchandiser, and dual temp case





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



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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Crystal Merchandiser® RVLC30IM Remote Specs

RVLC30IM

Refrigeration Data



Set Points	°F
Evaporator Temperature ¹	0
Discharge Air Temperature (w/ 8°F Superheat)	4

Notes:

1. 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 panel			
Energy Use with Parallel Rack System 2	Per Door Avg	2-Door	3-Door		
RVLC30 Baseline Btu/h	910	1,970	2,880		
Energy Use with Condensing Unit ²	Per Door Avg	2-Door	3-Door		
RVLC30 Baseline Btu/h	965	2,090	3,055		
Btu/h Adders	Per Door Avg	2-Door	3-Door		
Anti-Sweat High-Humidity Package	+100	+200	+300		
End Panels	Btu/h Per Case				
Glass Windowed End Panel (1-Pair) ³	+288				

Notes:

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



	Outlet Size (in.)		
Refrigeration Piping: R-404A & R-448A 4	2-Door	3-Door	
Suction Line O.D. (Standard Refrigeration Exit)	7/8	7/8	
Suction Line O.D. (Top Refrigeration Exit)	5/8	5/8	
Liquid Line O.D. (Electric Defrost)	3/8	3/8	
Liquid Line O.D. (Hot Gas Defrost)	1/2	1/2	
Refrigeration Piping: CO ₂ ⁴	2-Door	3-Door	
Suction Line O.D. (Standard Refrigeration Exit)	1/2	1/2	
Suction Line O.D. (Top Refrigeration Exit)	1/2	1/2	
Liquid Line O.D. (Electric Defrost)	3/8	3/8	
Liquid Line O.D. (Hot Gas Defrost)	1/2	1/2	

Notes:

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

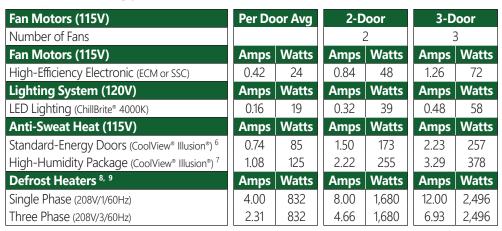
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Crystal Merchandiser® RVLC30IM Remote Specs

RVLC30IM

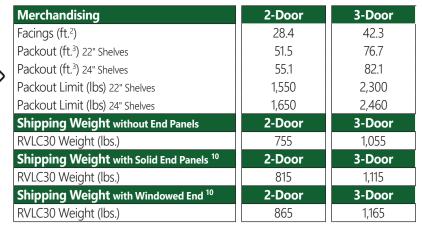
Electrical & Energy Data 5



Notes:

- 5. Amps are based on electrical nameplate values. Watts are based on laboratory observations of actual energy use.
- 6. Standard doors include glass heat, rail heat, mullion heat, and a deep coil.
- 7. High-humidity package includes 10% increase in glass heat, rail heat, and mullion heat. This package also includes a deep coil and an anti-sweat controller.
- 8. Electric Defrost: 1 per day. Defrost termination temperature setting is 50°F. Failsafe time is 55 minutes. Refer to the Installation & Operation Manual for details.
- 9. Hot Gas Defrost: 1 per day. Defrost termination temperature setting is 65°F. Failsafe time is 30 minutes. Refer to the Installation & Operation Manual for details. Zero Zone recommends 1 riser per refrigeration circuit when utilizing hot gas defrost.

Physical Data



Notes:

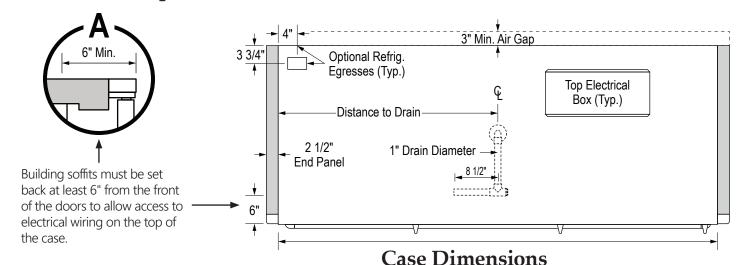
10. Each solid end panel: 30 lbs. Each windowed end panel: 55 lbs.



Crystal Merchandiser® RVLC30IM Remote Specs

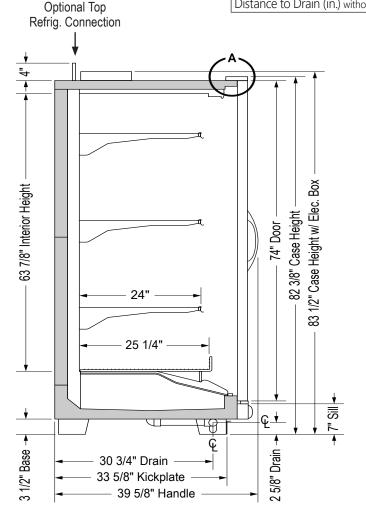
RVLC30IM

RVLC30IM Top View



RVLC30IM End View

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



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Coil cover support posts, protective rear wall grid, and heavy duty bottom wire rack per door are included.

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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

Applications

Electrical Enclosure



Fans and Evaporator Coil

(At Rear of Ceiling)







Standard

Refrigeration

and TXV/EEV

Merchandising (6-Door)

Facings: 69.8 ft²

Quick Specs

Packout: 133.4 ft³ with 24" x 24" deep shelves

Features & Options

Energy (Btu/h per Door)*
Standard: 410 at 28°F Evaporator
*when used with parallel rack system

Go Green

Remote cases ready for CO₂

High Humidity

Control climate challenges with our advanced humidity package

CoolView® Doors

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

LED Lighting

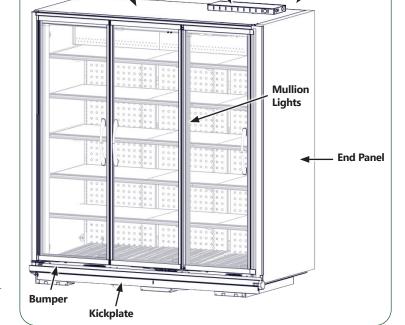
ChillBrite® 3500K or 4000K LED Lighting

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

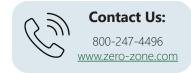
Hybrid™ Display Case

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





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

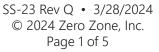


Specifications are subject to change without notice. All dimensions are nominal. Case designed to operate in an ambient temperature of 75°F and relative humidity of 55% or lower.











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Crystal Merchandiser® RVMC24 Remote Specs

RVMC24 and RVMC24RL

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 (incl	udes 1 pair of	end panels)
Energy Use with Parallel Rack System ³	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 ³	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) 4	+410				



Note

- 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	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.



	Outlet Size (in.)			
Refrigeration Piping: R-404A & R-448A ⁶	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 ₂ ⁶	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

Votes:

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.

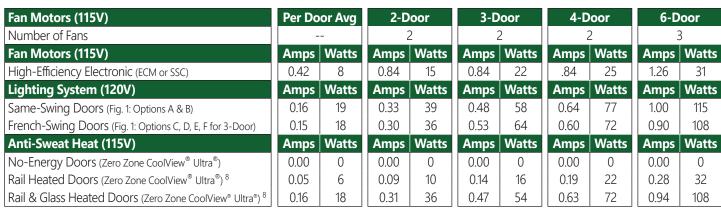
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Crystal Merchandiser® RVMC24 Remote Specs

RVMC24 and RVMC24RL

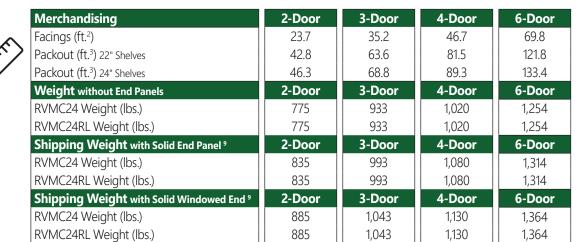
Electrical & Energy Data 7



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.

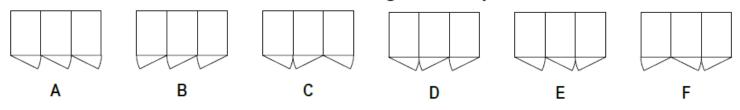
Physical Data



Notes:

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

FIG. 1: 3-Door Configuration Options

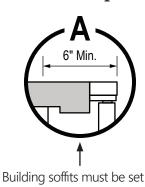


ZERO ZONE

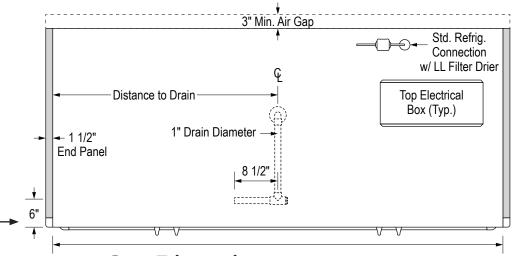
Crystal Merchandiser® RVMC24 Remote Specs

RVMC24 and RVMC24RL

RVMC24 Top View



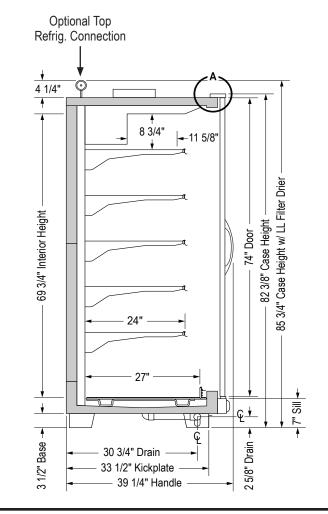
Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.



Case Dimensions

Measurements	2-Door	3-Door	4-Door	6-Door
Case Length (in.) without End Panels		72 1/2		
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

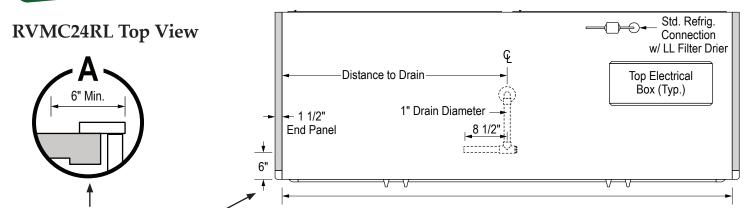


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Crystal Merchandiser® RVMC24 Remote Specs

RVMC24 and RVMC24RL

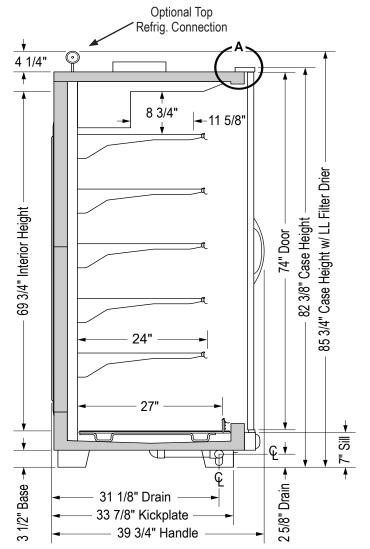


Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.

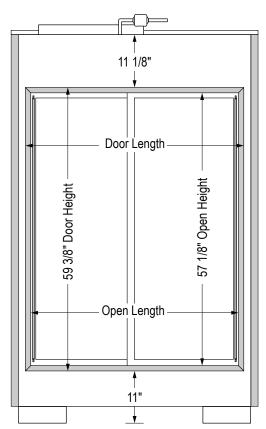
Case Dimensions

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



Crystal Merchandiser® RVMC24D Specs

Medium Temp Reach-In Remote Display Cases 2-Door, 3-Door, 4-Door, and 6-Door Cases; Rear Load (RL) Cases

Applications



Fans and Evaporator Coil

(At Rear of Ceiling)





Electrical Enclosure



Mullion

Standard

Refrigeration

and TXV/EEV

End Panel

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 ft²

Packout: 156.5 ft³ with 24" 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

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

LED Lighting

ChillBrite® 3500K and 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 backto-back ultra-narrow model

Hybrid™ Display Case

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



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

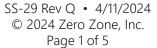


Specifications are subject to change without notice. All dimensions are nominal. Case designed to operate in an ambient temperature of 75°F and relative humidity of 55% or lower.









Bumper

Kickplate





Crystal Merchandiser® RVMC24D Remote Specs

RVMC24D and RVMC24DRL

ZERO ZONE

Crystal Merchandiser® RVMC24D Remote Specs

RVMC24D and RVMC24DRL

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 (incl	udes 1 pair of	end panels)
Energy Use with Parallel Rack System ³	Per Door Avg	2-Door	3-Door	4-Door	6-Door
RVMC24D Baseline Btu/h	410	930	1,360	1,740	2,570
RVMC24DRL Baseline Btu/h	410	930	1,360	1,740	2,570
Energy Use with Condensing Unit ³	Per Door Avg	2-Door	3-Door	4-Door	6-Door
RVMC24D Baseline Btu/h	445	1,005	1,470	1,880	2,775
RVM24DRL Baseline Btu/h	445	1,005	1,470	1,880	2,775
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) 4	+410				

Notes

- 3. Baseline Evaporator Btu/h based on LED lighting (Zero Zone ChillBrite® 4000K), standard-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	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.



		Outlet Size (in.)					
Refrigeration Piping: R-404A & R-448A 6	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 ₂ 6	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			

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 Do	or Avg	2-D	oor	3-D	oor	4-D	oor	6-D	oor
	Number of Fans	-			2		2		2] 3	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®) 8	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

Note

- 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.

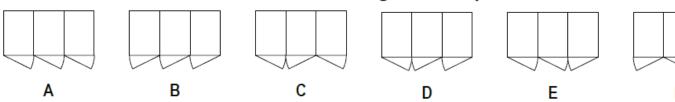
Physical Data

Merchandising	2-Door	3-Door	4-Door	6-Door
Facings (ft.²)	23.7	35.2	46.7	69.8
Packout (ft.3) 24" Shelves	48.1	71.5	95.1	141.9
Packout (ft.3) 27" Shelves	53.0	78.8	104.8	156.5
Shipping Weight without End Panels	2-Door	3-Door	4-Door	6-Door
RVMCD Weight (lbs.)	775	933	1,020	1,254
RVMCDRL Weight (lbs.)	775	933	1,020	1,254
Shipping Weight with End Panels	2-Door	3-Door	4-Door	6-Door
RVMCD Weight (lbs.)	835	993	1,080	1,314
RVMCDRL Weight (lbs.)	835	993	1,080	1,314
Shipping Weight with Windowed End 9	2-Door	3-Door	4-Door	6-Door
RVMCD Weight (lbs.)	885	1,043	1,130	1,364
RVMCDRL 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



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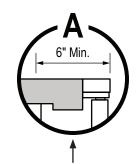
Crystal Merchandiser® RVMC24D Remote Specs

RVMC24D and RVMC24DRL

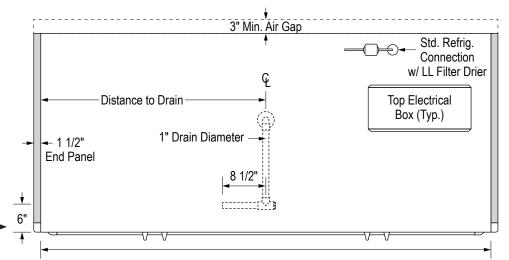
Crystal Merchandiser® RVMC24D Remote Specs

RVMC24D and RVMC24DRL

RVMC24D Top View



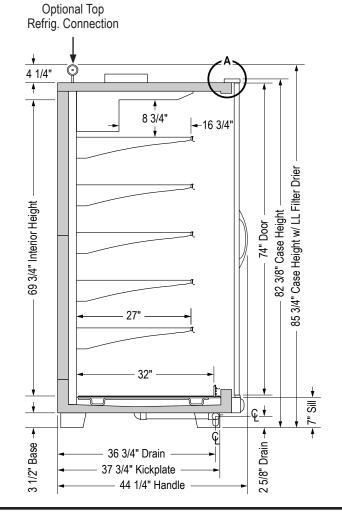
Building soffits must be set back at least 6" from the front of the doors to allow access to electrical wiring on the top of the case.



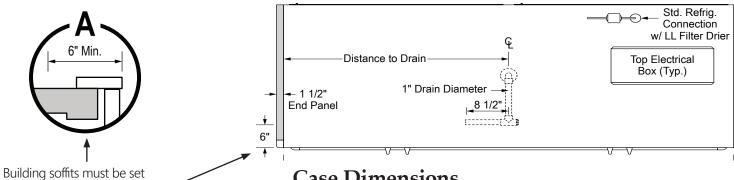
Case Dimensions

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

RVMC24D End View



RVMC24DRL Rear Load Top View



Case Dimensions

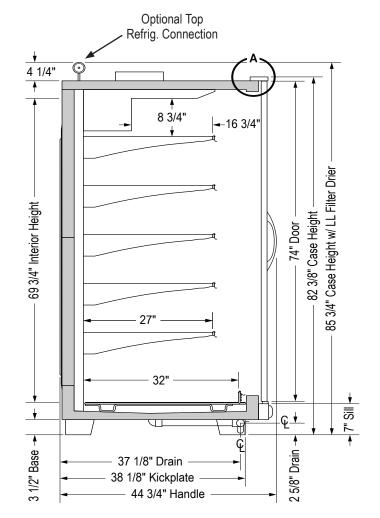
Measurements	2-Door	3-Door	4-Door	6-Door
Case Length (in.) without End Panels	48 3/4	72 1/2	96 3/8	143 7/8
Case Length (in.) with End Panels	53 3/4	77 1/2	101 3/8	148 7/8
Distance to Drain (in.) without End Panels	24 3/8	36 1/4	48 1/8	71 7/8

RVMC24DRL End View

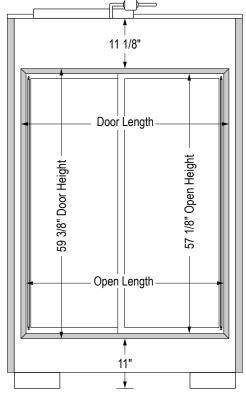
back at least 6" from the front of the doors to allow access to

electrical wiring on the top of

the case.



RVMC24DRL 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

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Quick Specs

Energy (Btu/h per Door)*

Standard: 410 at 28°F Evaporator *when used with parallel rack system

Merchandising (2-Door)

Facings: 23.6 ft²

Packout: 26.7 ft³ with 24" x 15" deep shelves

Features & Options

Go Green

Remote cases ready for CO₂

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

Back-to-Back Cases

Save on floor space and energy by choosing a back-to-back case.

Additional Models

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

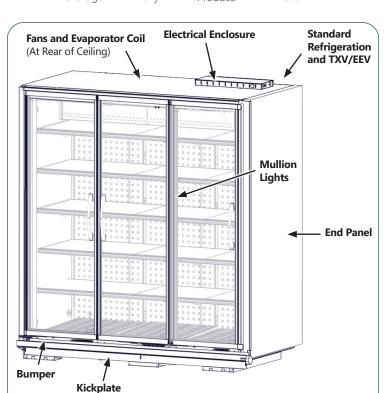
Applications













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

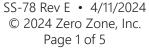


Specifications are subject to change without notice. All dimensions are nominal. Case designed to operate in an ambient temperature of 75°F and relative humidity of 55% or lower.













Crystal Merchandiser® RVMC24UN Remote Specs

RVMC24UN and RVMC24BBUN

Refrigeration Data ¹



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

- 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 (Inclu	ides 1 pair of end panels)
Energy Use with Parallel Rack System ³	Per Door Avg	2-Door	3-Door
RVMC24UN Baseline Btu/h		930	
RVMC24BBUN Baseline Btu/h	410	930	1,360
Energy Use with Condensing Unit ³	Per Door Avg	2-Door	3-Door
RVMC24UN Baseline Btu/h		1,005	
RVM24BBUN Baseline Btu/h	440	1,005	1,470
Btu/h Adders RVMC24UN	Per Door Avg	2-Door	3-Door
Rail Heated Doors (Zero Zone CoolView® Ultra®)		+20	
Rail & Glass Heated Doors (Zero Zone CoolView® Ultra®)		+60	
Btu/h Adders RVMC24BBUN	Per Door Avg	2-Door	3-Door
Rail Heated Doors (Zero Zone CoolView® Ultra®)	+10	+20	+30
Rail & Glass Heated Doors (Zero Zone CoolView® Ultra®)	+30	+60	+90



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.



	Outlet S	Size (in.)
Refrigeration Piping: R-404A & R-448A 4	2-Door	3-Door
Suction Line O.D. (Top Refrigeration Exit)	1/2	1/2
Liquid Line O.D.	3/8	3/8
Refrigeration Piping: CO ₂ ⁴	2-Door	3-Door
Suction Line O.D. (Top Refrigeration Exit)	3/8	3/8
Liquid Line O.D.	3/8	3/8

Notes:

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

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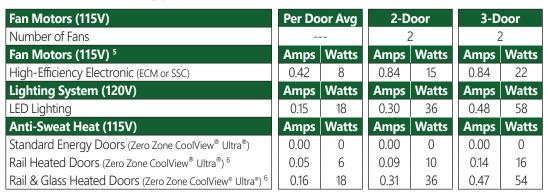
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Crystal Merchandiser® RVMC24UN Remote Specs

RVMC24UN and RVMC24BBUN

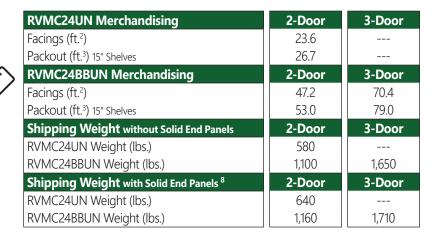
Electrical & Energy Data 5



Notes:

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

Physical Data



Notes:

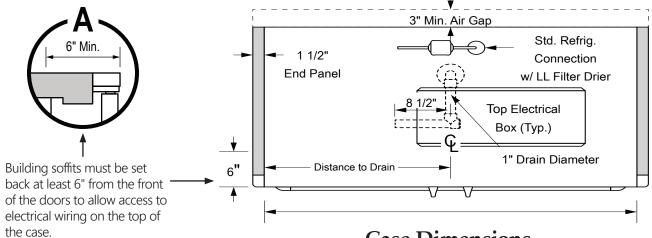
8. Each solid end panel: 30 lbs.



Crystal Merchandiser® RVMC24UN Remote Specs

RVMC24UN and RVMC24BBUN

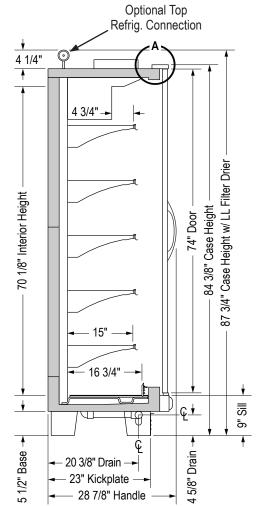
RVMC24UN Top View



Case Dimensions

Measurements	2-Door
Case Length (in.) without End Panels	48 3/4
Case Length (in.) with End Panels	53 3/4
Distance to Drain (in.) without End Panels	24 3/8

RVMC24UN End View



IMPORTANT: The Ultra Narrow must be anchored to either another case or a wall to ensure the case will not tip forward. See Installation & Operation Manual for more information.

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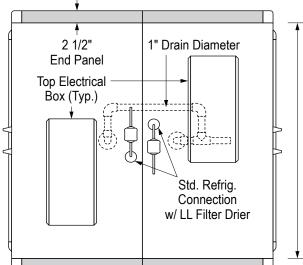




Crystal Merchandiser® RVMC24UN Remote Specs

RVMC24UN and RVMC24BBUN

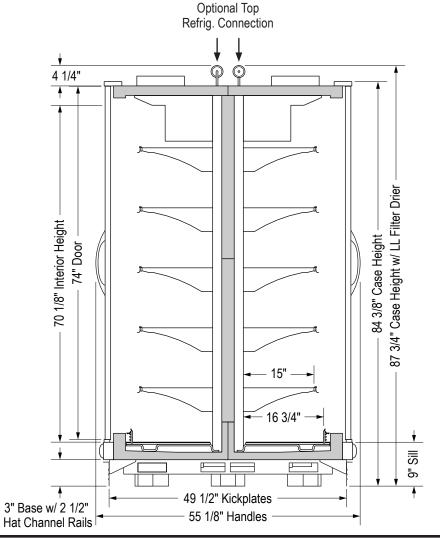
RVMC24BBUN Top View



Case Dimensions

Measurements	П	2-Door	3-Door
Case Length (in.) without End Panels		48 3/4	53 3/4
Case Length (in.) with End Panels		53 3/4	58 3/4

RVMC24BBUN End View





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