

Portion of parts removed for clarity.

Technical Data Sheet

VRL-B1A

Self-Contained Air-Cooled
R-290 Merchandiser

Applications

Frozen Food

P/N 3155543 Rev F

October 2024

Models Covered:

VRL-B1A

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Certifications



UL EPH Certification

This merchandiser model is manufactured to meet ANSI/SCC Standards requirements for construction, materials, and cleanability.

This case is intended for NSF 2 ambient applications (80°F / 55% RH).

⚠ WARNING

Component parts shall be replaced with like components, and servicing shall be done by factory authorized service personnel only, so as to minimize the risk of possible ignition due to incorrect parts or improper service.

We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

VRL-B1A

Frozen Food

Refrigeration Data ^{1**}

		Frozen Food		
		1 Door	2 Door	3 Door
Refrigeration	Discharge Air °F (°C) ¹	-10 to 0 (-23 to -18)	-7 to 2 (-21 to -16)	-10 to 0 (-23 to -18)
	Average Evaporator °F (°C) ²	-20 to 3 (-29 to 16)	-15 to 5 (-26 to -15)	-20 to 3 (-29 to 16)
	Total Heat of Rejection ³	1672	3341	6682
Condensing Unit	System Cooling Capacity ⁴	1096	2018	4036
Evaporator Fan Speed	8" Fan Assembly	1100	1100	1100

Notes:

1. Discharge air temperature values correspond to a range that covers when the compressor is running, as well as, when the compressor is off.
2. Evaporator inlet temperature is measured with a thermocouple placed in the evaporator inlet. This published range corresponds to a window when the compressor is working, as well as when its off.
3. Total heat rejection listed for a maximum design conditions, normal operating loads may be lower.
4. System cooling capacity is calculated at an evaporator temperature of -31°F and a condensing temperature of 113 °F.

Defrost Data

	1 Door	2 Door	3 Door
Frequency (hours between defrost)	8	8	8
Defrost Type	Hot gas	Hot gas	Hot gas
Defrost Termination (Temp °F)	55	47	60
Time (Minutes)	50	40	40

Energy Consumption Data⁵ DEC (kWH/day)

1 Door	2 Door	3 Door
6.3	10.71	14.6

⁵ Energy values obtained under AHRI 1200 evaluating case performance with frozen food conditions of IAT 0°F.

Sound Data

1 Door	2 Door	3 Door
66.8 dB (A)	62 dB (A)	64.8 dB (A)

Refrigerant Data Refrigerant Type: R-290 Charge

1 Door	.17 lb	2.8 oz	80 g
2 Door	0.24 lbs	3.9 oz	110 g
3 Door	.198 lbs	3.17 oz	90 g

Product Data

	1 Door	2 Door	3 Door
Gross Refrigerated Volume - Cu Ft (m ³) ⁶	22.8 (0.645)	44.5 (1.26)	66.1 (1.87)
AHRI Total Display Area - Sq Ft (m ²) ⁷	8 (0.74)	16 (1.49)	24 (2.23)
Shelf Area - Sq Ft (m ²) ⁸	18.1 (1.68)	36.2 (3.36)	54.3 (5.04)

⁶ Refrigerated Volume is based on AHAM. The interior volume of a refrigerator or freezer as calculated by AHAM Standard Household Refrigerators/Household Freezers (ANSI/AHAM HRF-1-2004).

⁷ Computed using AHRI 1200 standard methodology : Total Display Area ft² (m²).

⁸ Shelf surface area is composed of bottom deck plus standard shelf complement for this model: (4) shelves standard configuration, evenly distributed vertically plus (1) bottom shelf. This configuration is per door.

Self-Contained, Reach-in Bottom Mount,
120V Merchandiser

VRL-B1A
Frozen Food

DOE 2017
Energy Efficiency
Compliant

Husmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

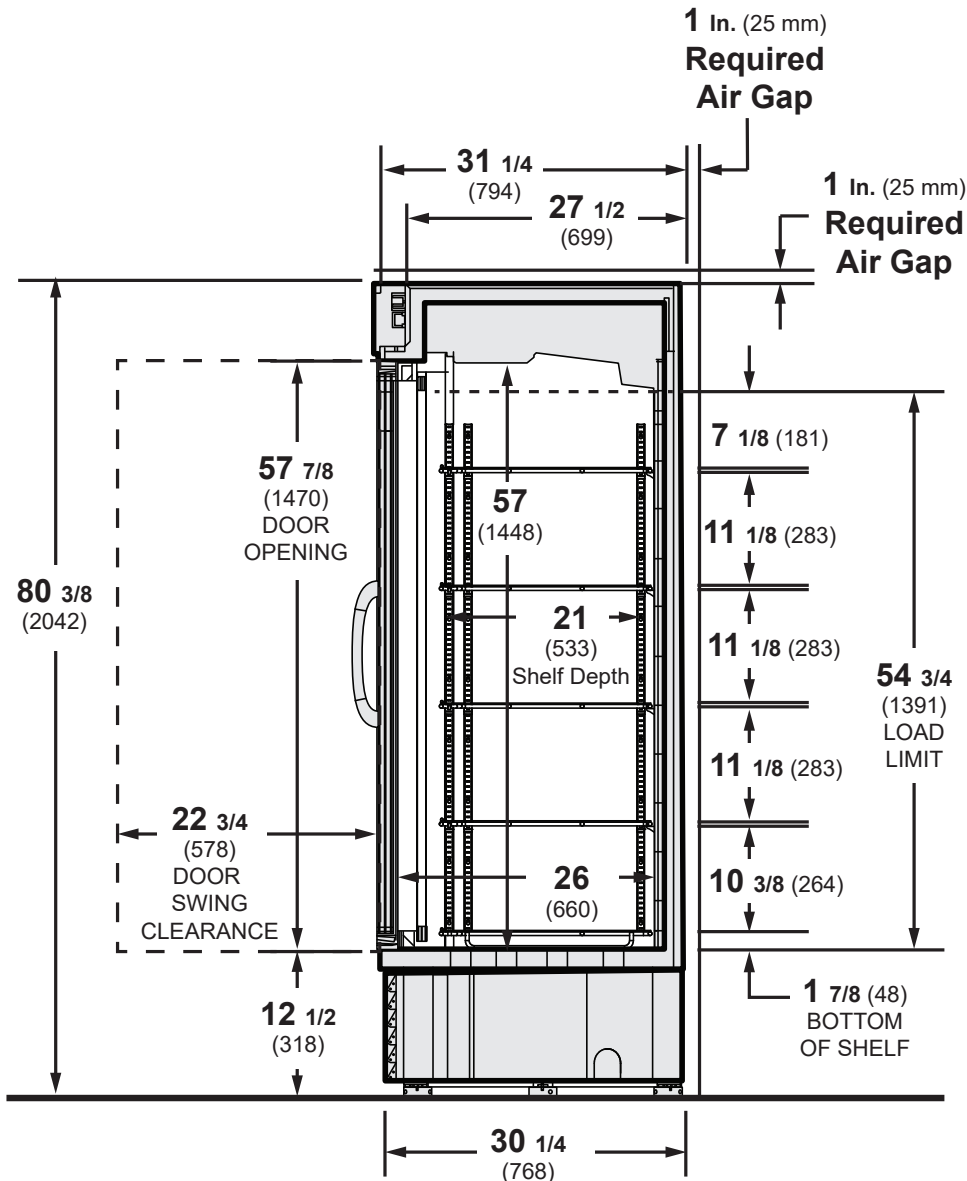
Clearance Required

A clearance of 36 inches is needed in front of the case to ensure no obstruction in the condensing unit air flow.

1 inch clearance required at the top and rear of the case.

Dimensions shown as in. and (mm).

Zero clearance required on the sides of the case.

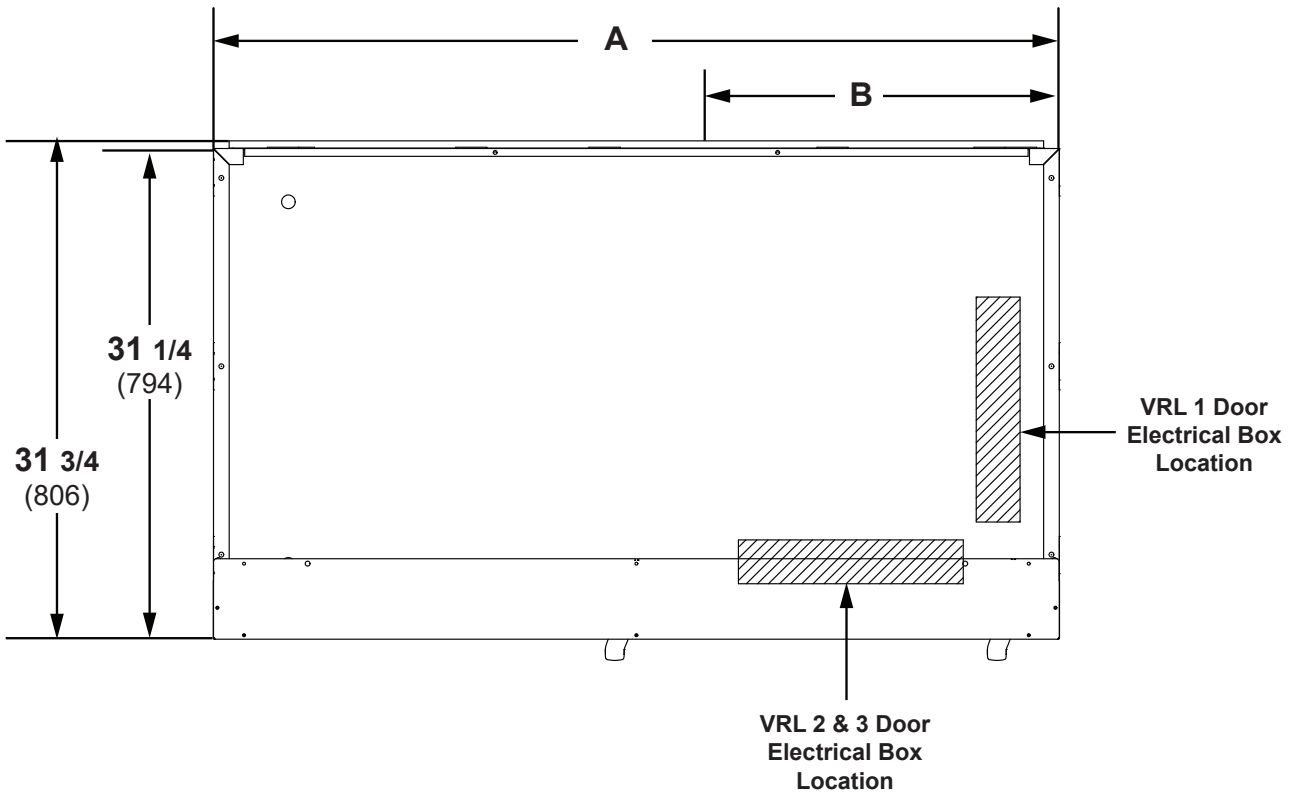


NOTE:
Shelf width is
24 3/4 in. (629 mm).

VRL-B1A
Frozen Food

Engineering
Plan Views

Dimensions shown as in. and (mm).

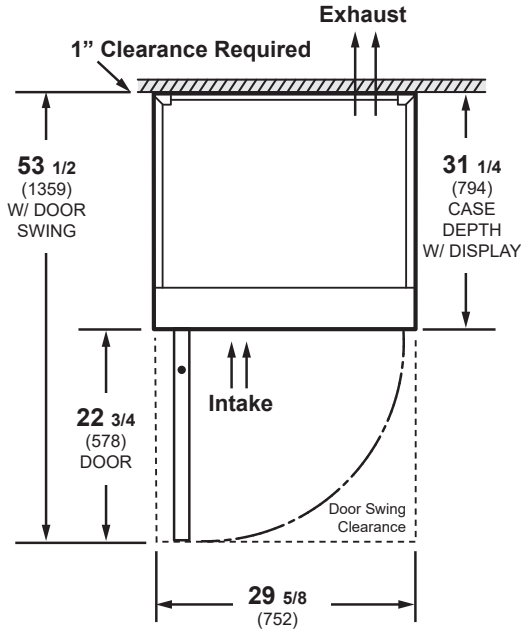


General Dimensions	1 Door	2 Door	3 Door
	(A) Case Length	29 ⁵ / ₈ (752)	54 (1372)
(B) Power Cord Outlet	14 ³ / ₄ (375)	2 ³ / ₄ (70)	2 ³ / ₄ (70)
(C) Electrical Box	Right	Right	Center

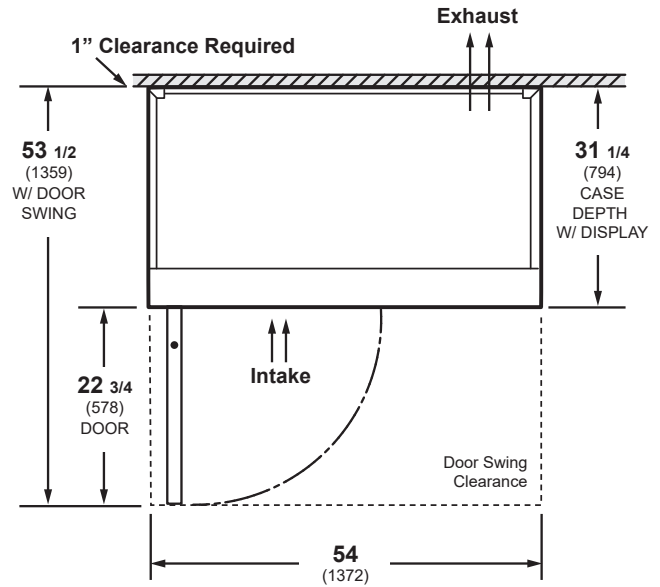
Engineering Plan Views

VRL-B1A Frozen Food

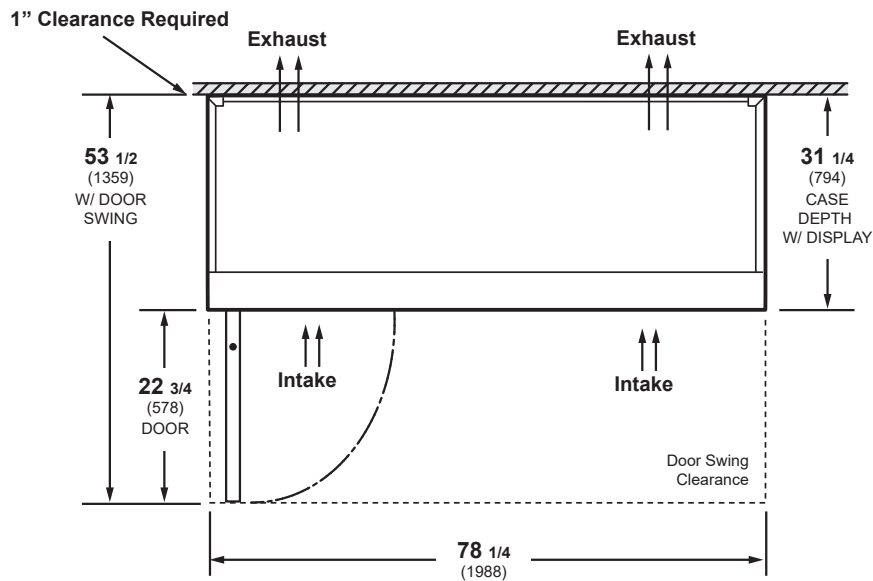
Dimensions shown as in. and (mm).



VRL 1 Door



VRL 2 Door

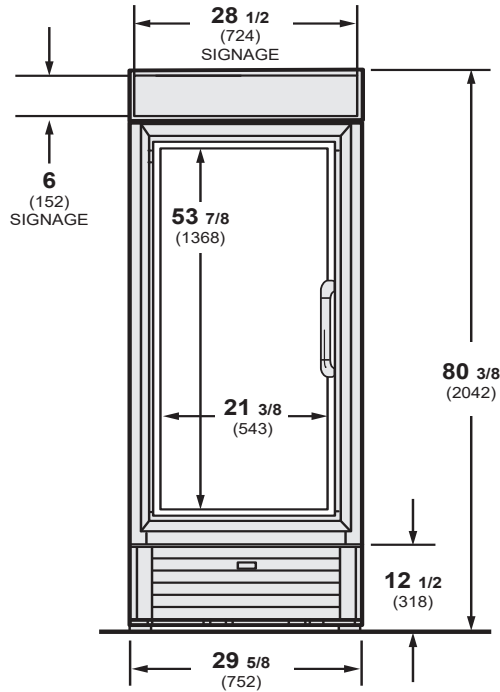


VRL 3 Door

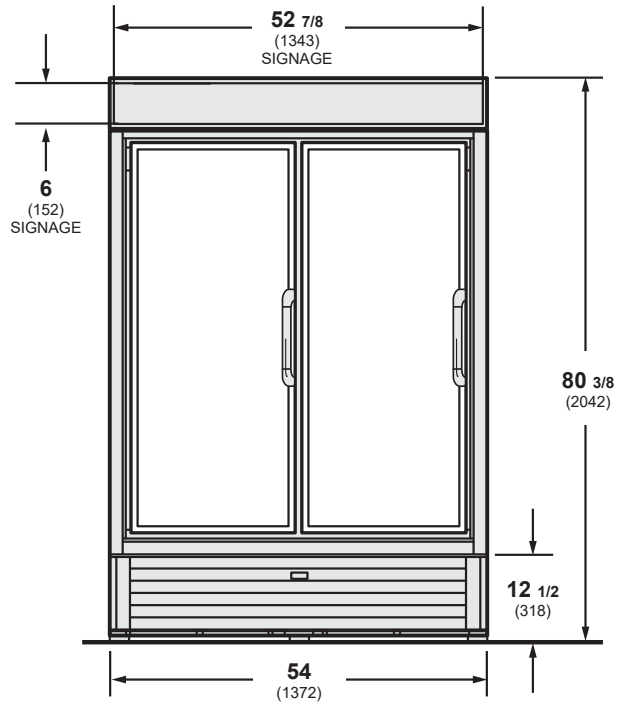
VRL-B1A
Frozen Food

Engineering
Front Views

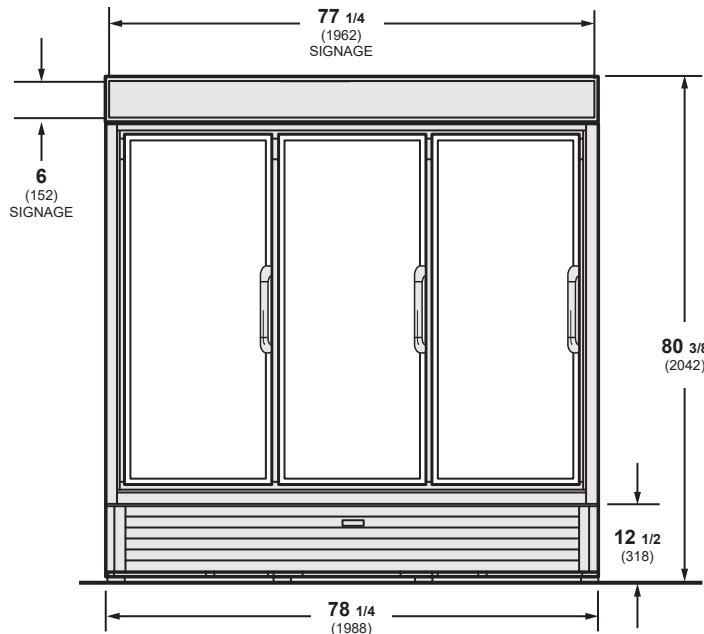
Note: The visible area per door is 8 ft² (1152 in²).



VRL 1
Door



VRL 2
Door



VRL 3
Door

VRL-B1A
Frozen Food

Electrical Data

	1 Dr	2 Dr	3 Dr
Merchandise Requirements			
Power Supply 120V / 1ph / 60Hz			
Total Load (Amps) (Load per each power supply cord)	5.5	10.5	16
Power cord Quantity	1	1	1

VRL NEMA Plugs



NEMA 5-15P
115V 60Hz
(1 and 2-door case models)



NEMA 5-20P
115V 60Hz
(3-door case models)

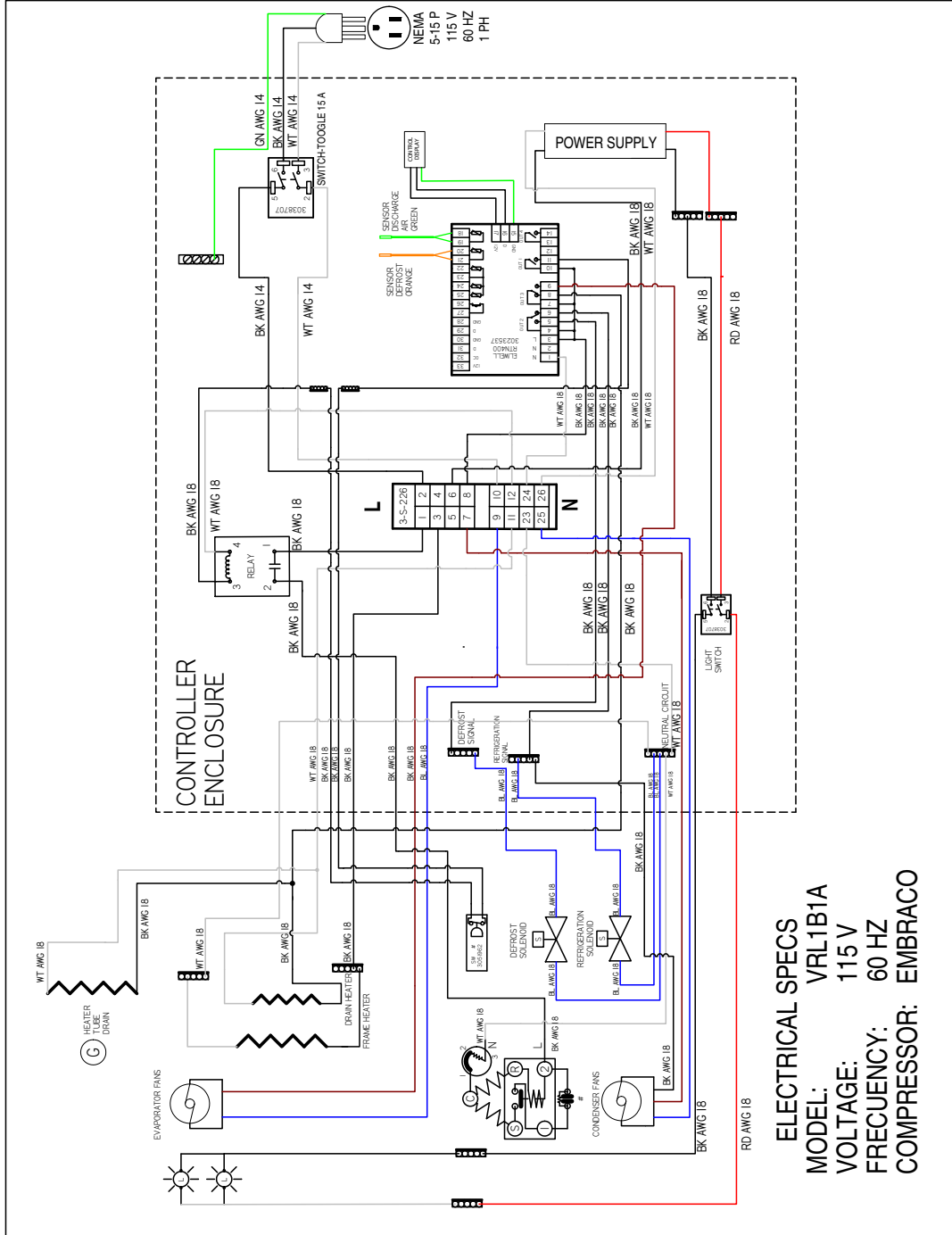
ESTIMATED SHIPPING WEIGHT †			
Case	1 Door	2 Door	3 Door
lb (kg)	362 (164.2)	631 (286)	877 (398)
† Actual weights will vary according to optional kits included.			

VRL-B1A

Frozen Food

Wiring Diagram

1 Door



ELECTRICAL SPECS
MODEL: VRL1B1A
VOLTAGE: 115 V
FREQUENCY: 60 HZ
COMPRESSOR: EMBRACO

- NOTES:**
1. APPLICABLE STANDARDS / SPECIFICATIONS
 ASME Y14.5M-1994, DIMENSIONS AND TOLERANCES
 2. KEY PRODUCT CHARACTERISTICS PER EPR-0006 & IDENTIFIED WITH SYMBOL
 3. MATERIAL - PAPER WHITE
 THICKNESS: 90 gr
 COATING: KAOLIN
 ADHESIVE: PERMANENT C4000
 4. REF NONE

[UL COLOR CODES / ABBREVIATIONS]

— RED = RD	— WHITE = WT
— BLACK = BK	— GREEN = GN
— BLUE = BL	— BROWN = BN
— YELLOW = YL	— ORANGE = OR
— GRAY = GY	— VIOLET = VT

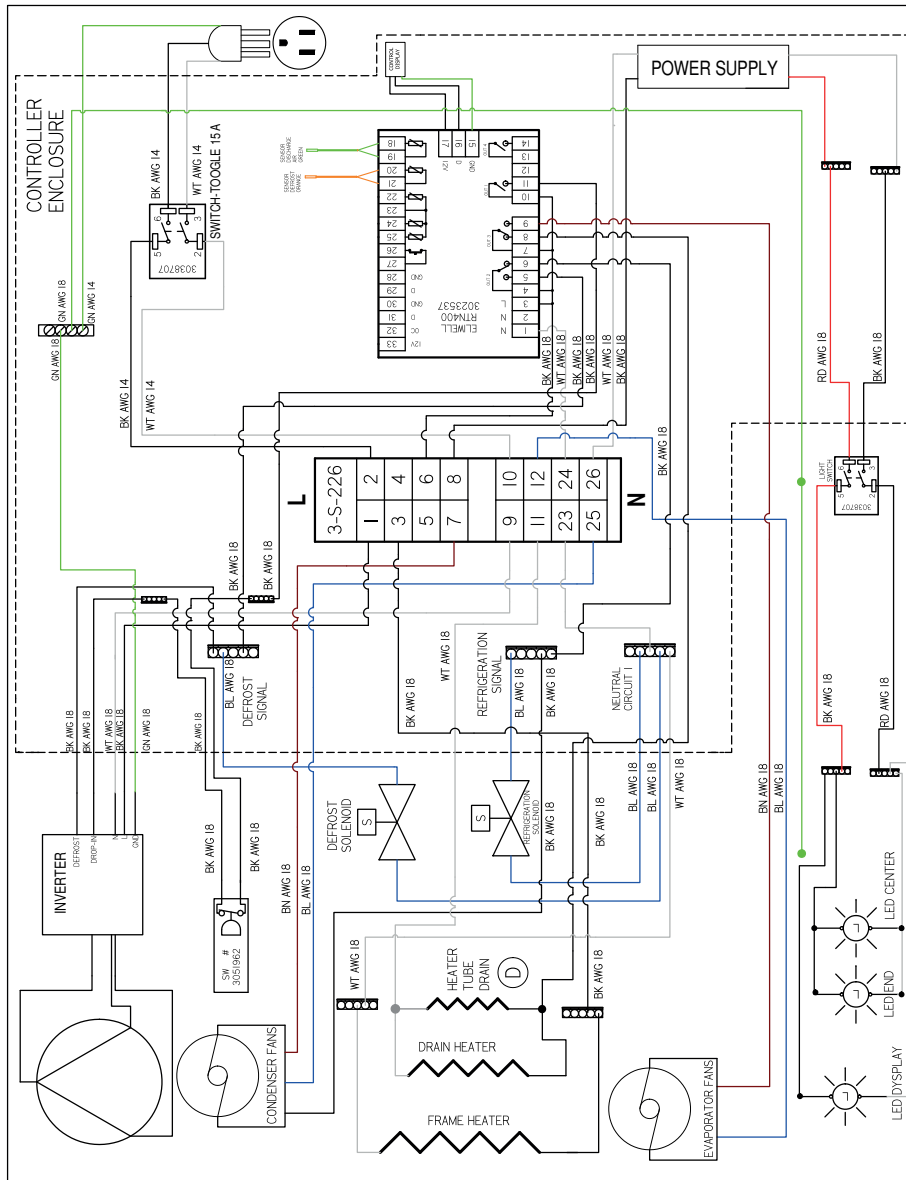
FACTORY I4GA WIRE

— FACTORY I4GA WIRE
— FIELD WIRE

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Wiring Diagram 2 Door

VRL-B1A Frozen Food



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 3. MATERIAL - PAPER WHITE
THICKNESS 90 gr
COATING, KAOLIN
 4. REF NONE
ADHESIVE PERMANENT C4000
 5. UNITS OF MEASUREMENT IN INCHES
 6. BLACK AND WHITE PRINT

3147478_D

UL COLOR CODES / ABBREVIATIONS	
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YELLOW = YL	ORANGE = OR
GRAY = GR	VIOLET = VT

FACTORY WIRE	
FACTORY LOGA WIRE	---
FIELD WIRE	---

ELECTRICAL SPECS
MODEL: VRL2B1A
VOLTAGE: 115 V
FREQUENCY: 60 HZ
COMPRESSOR: EMBRACO

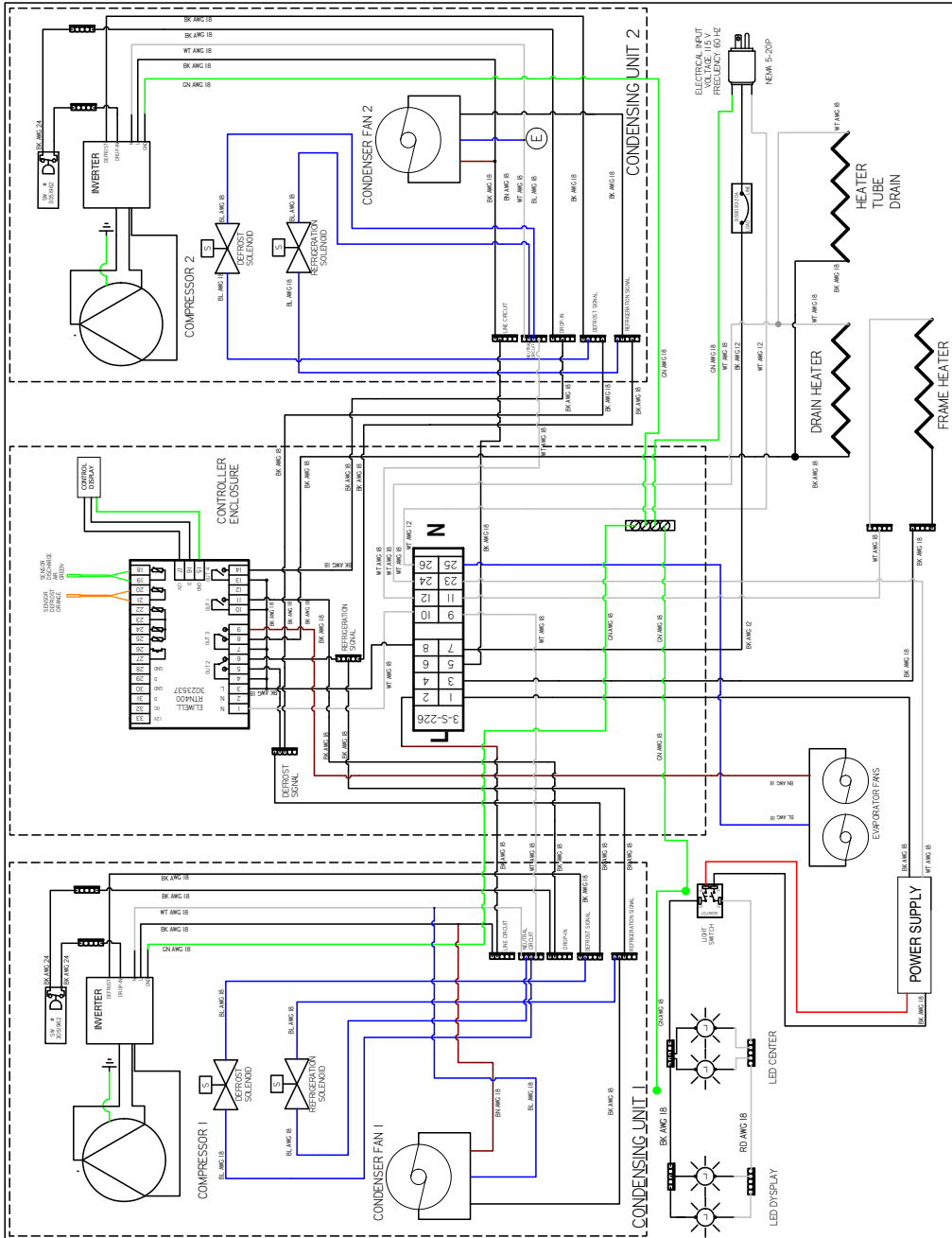
VRL-B1A

Frozen Food

Wiring Diagram

3 Door

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FACTORY 14GA WIRE

FACTORY 10GA WIRE

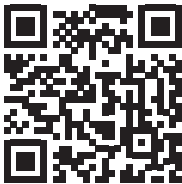
FIELD WIRE

UL COLOR CODES / ABBREVIATIONS

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 2. KEY PRODUCT CHARACTERISTICS PER EPR-0006 & IDENTIFIED WITH SYMBOL
 3. MATERIAL - PAPER WHITE
THICKNESS: 90 gr
COATING: KAOLIN
ADHESIVE: PERMANENT C4000
 4. REF NONE
 5. UNITS OF MEASUREMENT IN INCHES
 6. BLACK AND WHITE PRINT

ELECTRICAL SPECS
MODEL: VRL3B1A
VOLTAGE: 115 V
FREQUENCY: 60 HZ
COMPRESSOR: EMBRACO



Scan the QR code with your mobile device to access additional product information or order parts.

Parts may also be ordered at:

parts.hussmann.com

Call toll free: 1.855.487.7778

Revision History

Revision A: December 2021: Original Issue

Revision B: December 2021: Marketing updates

Revision C: January 2022: Added 2 door

Revision D: April 2022: Added 3 door and updated wiring diagrams.

Revision E: August 2023: Updated visible area and added it to the 1 door on page 6.

Revision F: October 2024: Updated cover page