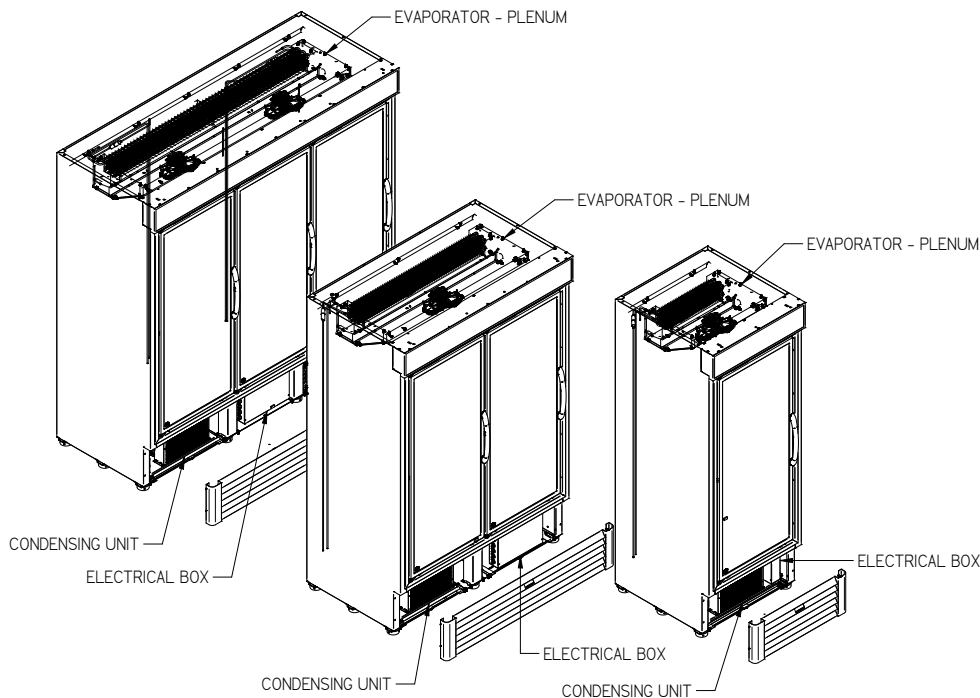




Portion of parts removed for clarity.

Technical Data Sheet

VRL-B1A

Self-Contained Air-Cooled
R-290 Merchandiser

Applications

Frozen Food

P/N 3155543 Rev G

February 2025

Models Covered:

VRL-B1A

Table of Contents

Performance Data	2
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Plan View	4
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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 II ambient applications of 80° F (26.7° C) and 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.

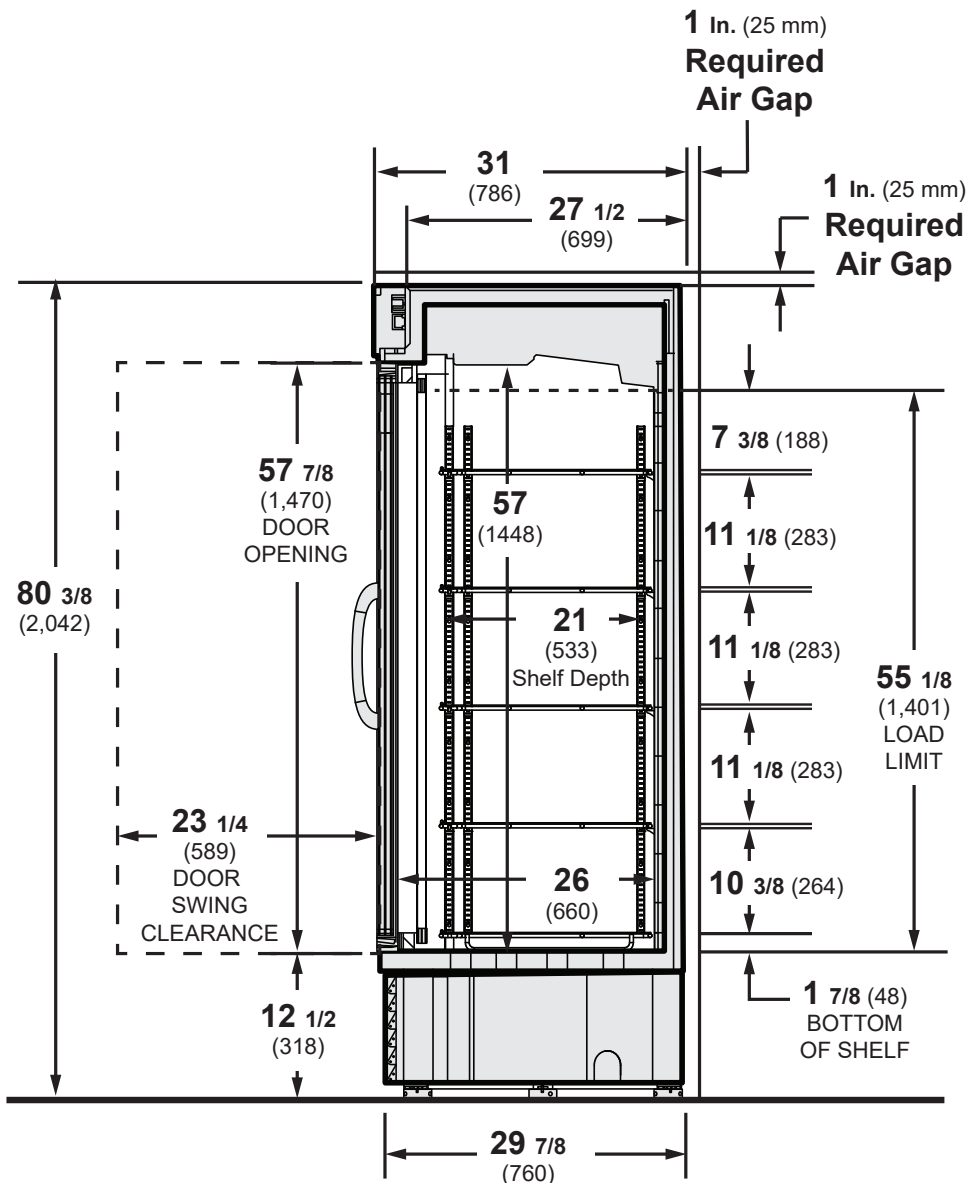
Clearance Required

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.

Zero clearance required on the right and left sides of the case.

Dimensions shown as in. and (mm).

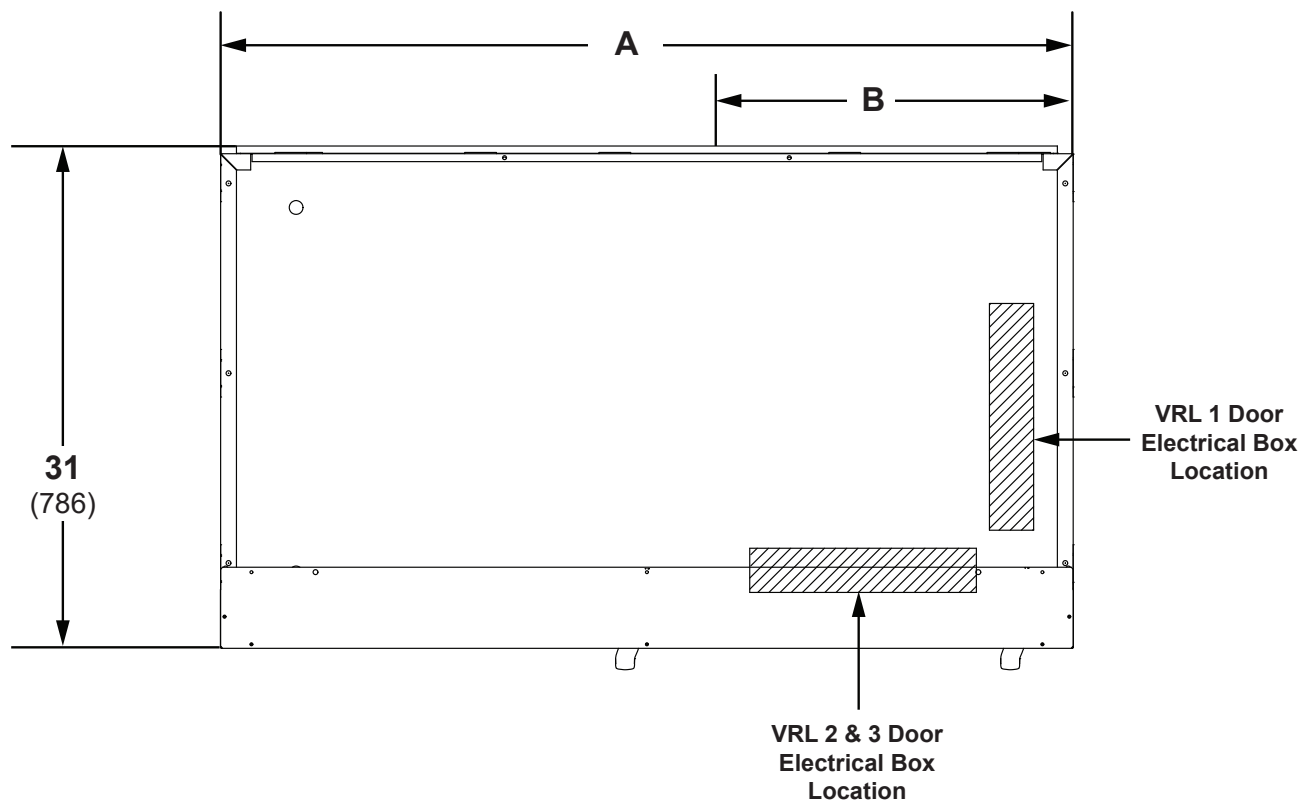


VRL-B1A

Frozen Food

Engineering Plan Views

Dimensions shown as in. and (mm).

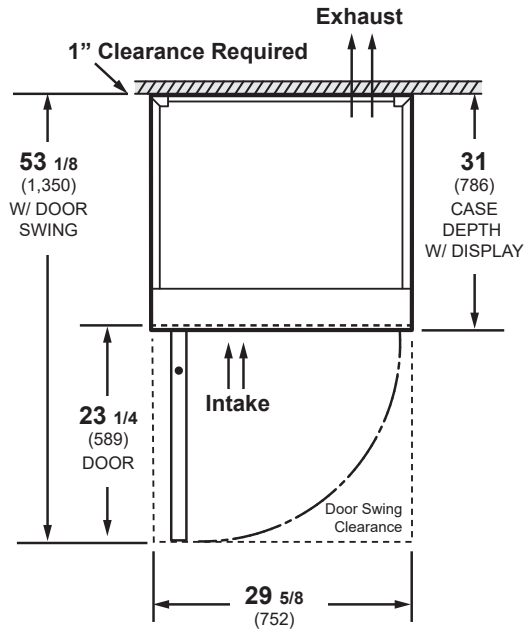


General Dimensions	1 Door	2 Door	3 Door
	29 ⁵ / ₈ (752)	54 (1372)	78 ¹ / ₄ (1988)
(A) Case Length	29 ⁵ / ₈ (752)	54 (1372)	78 ¹ / ₄ (1988)
(B) Power Cord Outlet	14 ³ / ₄ (375)	2 ³ / ₄ (70)	2 ³ / ₄ (70)
(C) Electrical Box	Right	Right	Center

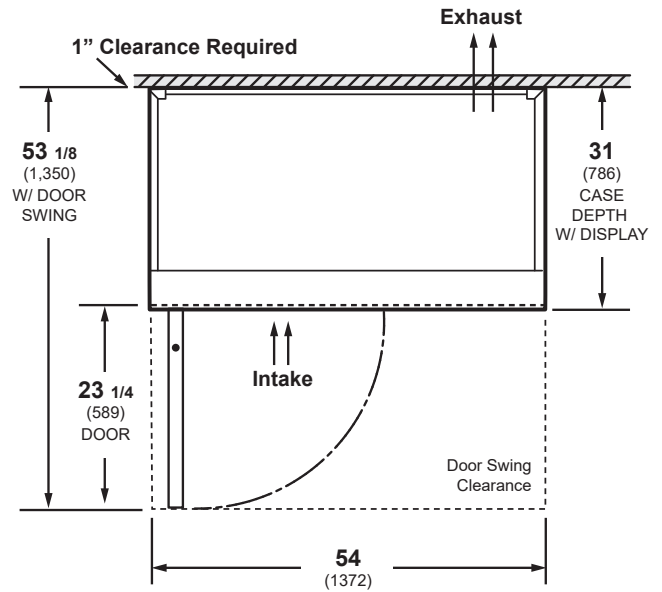
Engineering Plan Views

VRL-B1A Frozen Food

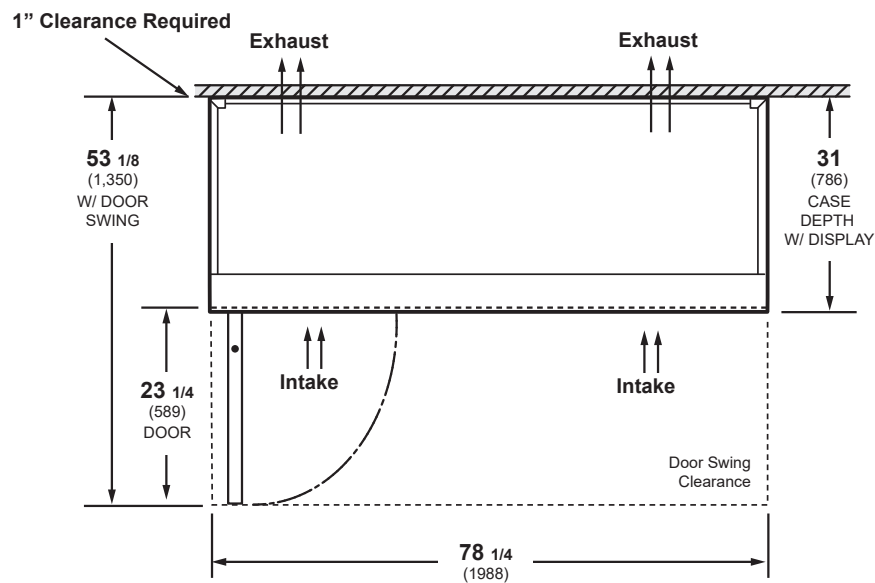
Dimensions shown as in. and (mm).



VRL 1 Door



VRL 2 Door



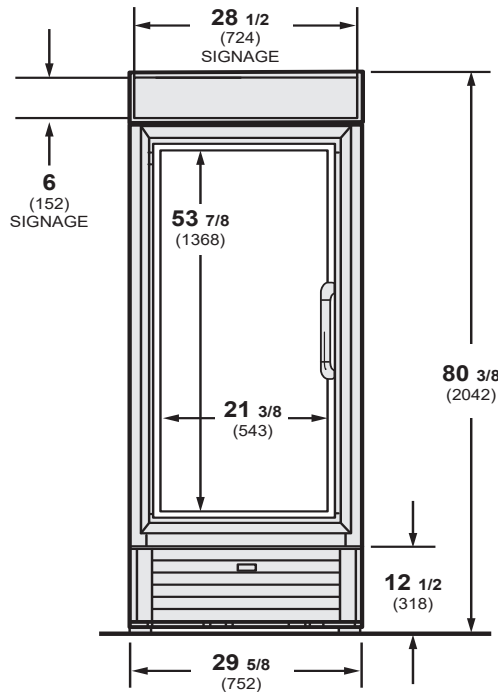
VRL 3 Door

VRL-B1A

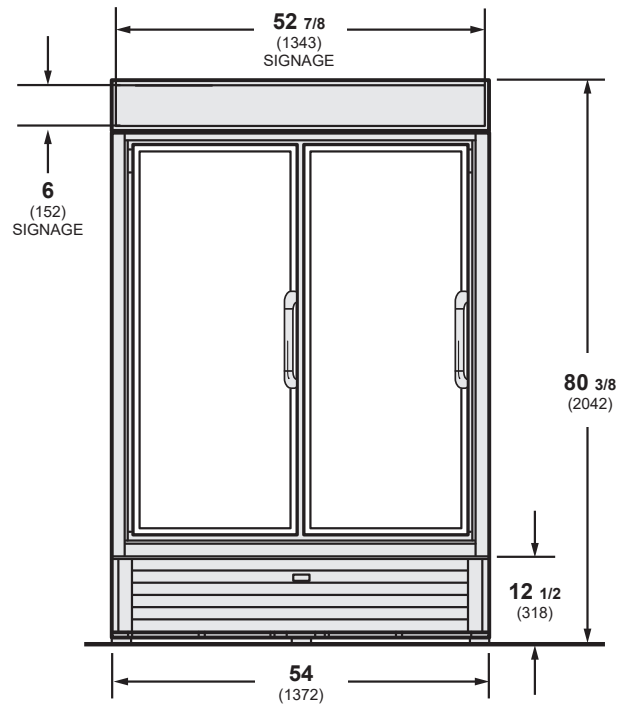
Frozen Food

Engineering Front Views

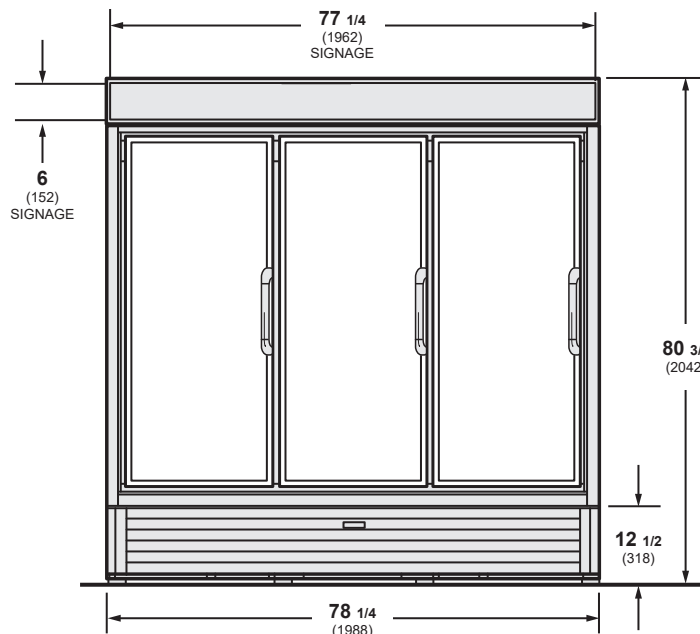
Note: The visible area per door is 8 ft ² (1152 in ²).



**VRL 1
Door**



**VRL 2
Door**



**VRL 3
Door**

Electrical Data

Hussmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards. Cases come standard with full interior lighting (on section on each and one on each mullion), but can optionally be ordered without end lighting as needed.

	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



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



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

ESTIMATED SHIPPING WEIGHT †

Case

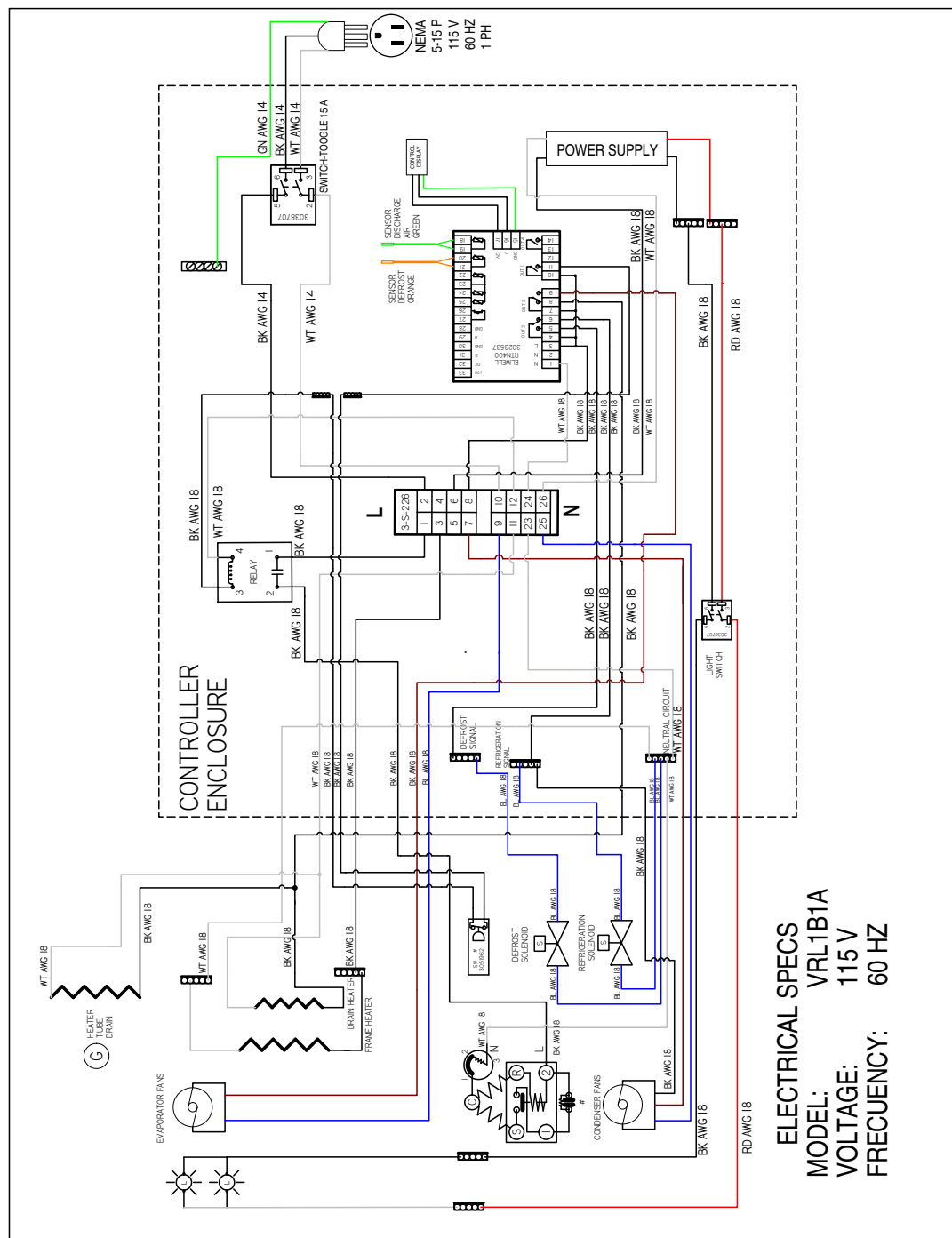
	1 Door	2 Door	3 Door
lb (kg)	362 (164.2)	631 (286)	877 (398)

† Actual weights will vary according to optional kits included.

VRL-B1A

Frozen Food

Wiring Diagram 1 Door



3145616_G

FACTORY 14GA WIRE	FACTORY 10GA WIRE	FIELD WIRE

UL COLOR CODES / ABBREVIATIONS

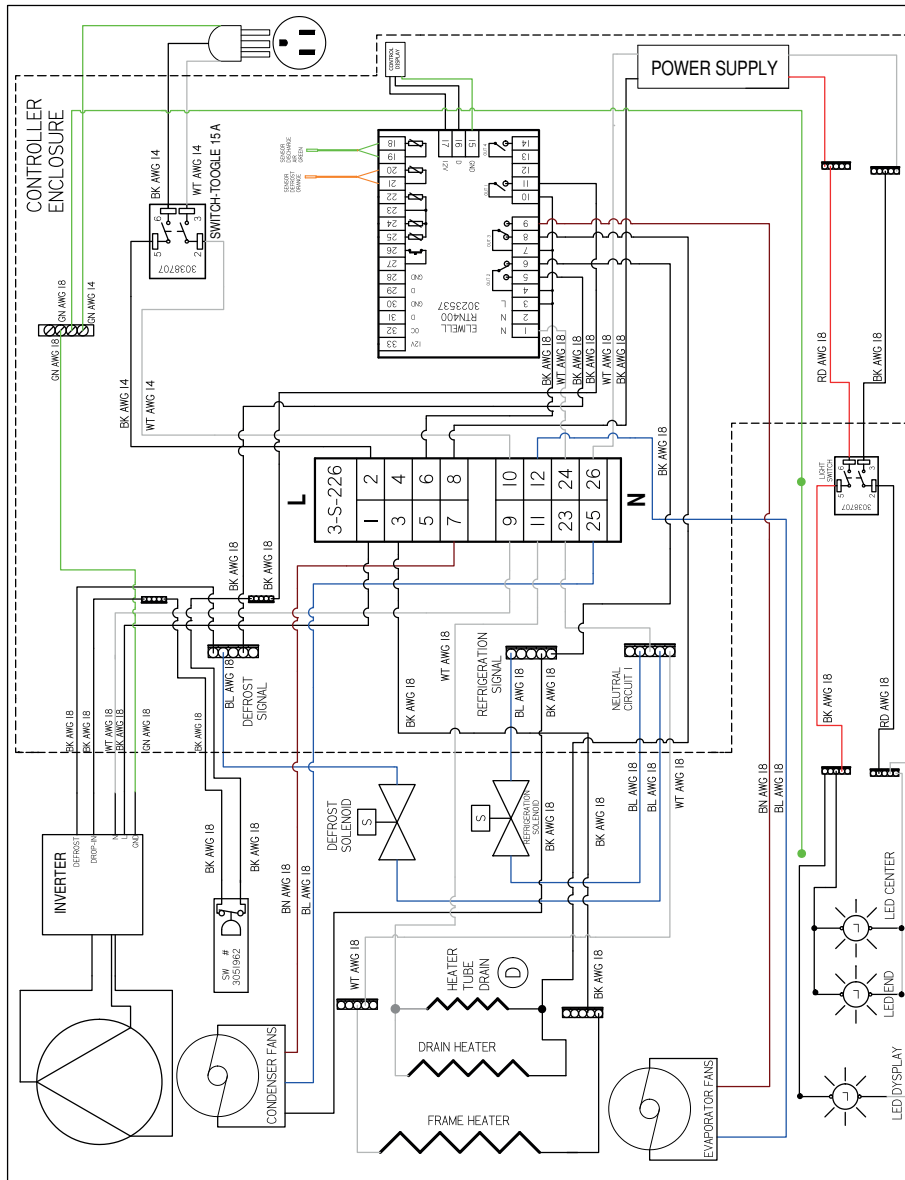
— RED = RD	— WHITE = WT
— BLACK = BK	— GREEN = GN
— BLUE = BL	— BROWN = BN
— YELLOW = YL	— ORANGE = OR
— GRAY = GY	— VIOLET = VT

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
4. ADHESIVE: PERMANENT C4000
REF: NONE

Wiring Diagram 2 Door

VRL-B1A Frozen Food



- 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
 5. UNITS OF MEASUREMENT IN INCHES
 6. BLACK AND WHITE PRINT

3147478_D

FACTORY IGA WIRE
FIELD WIRE

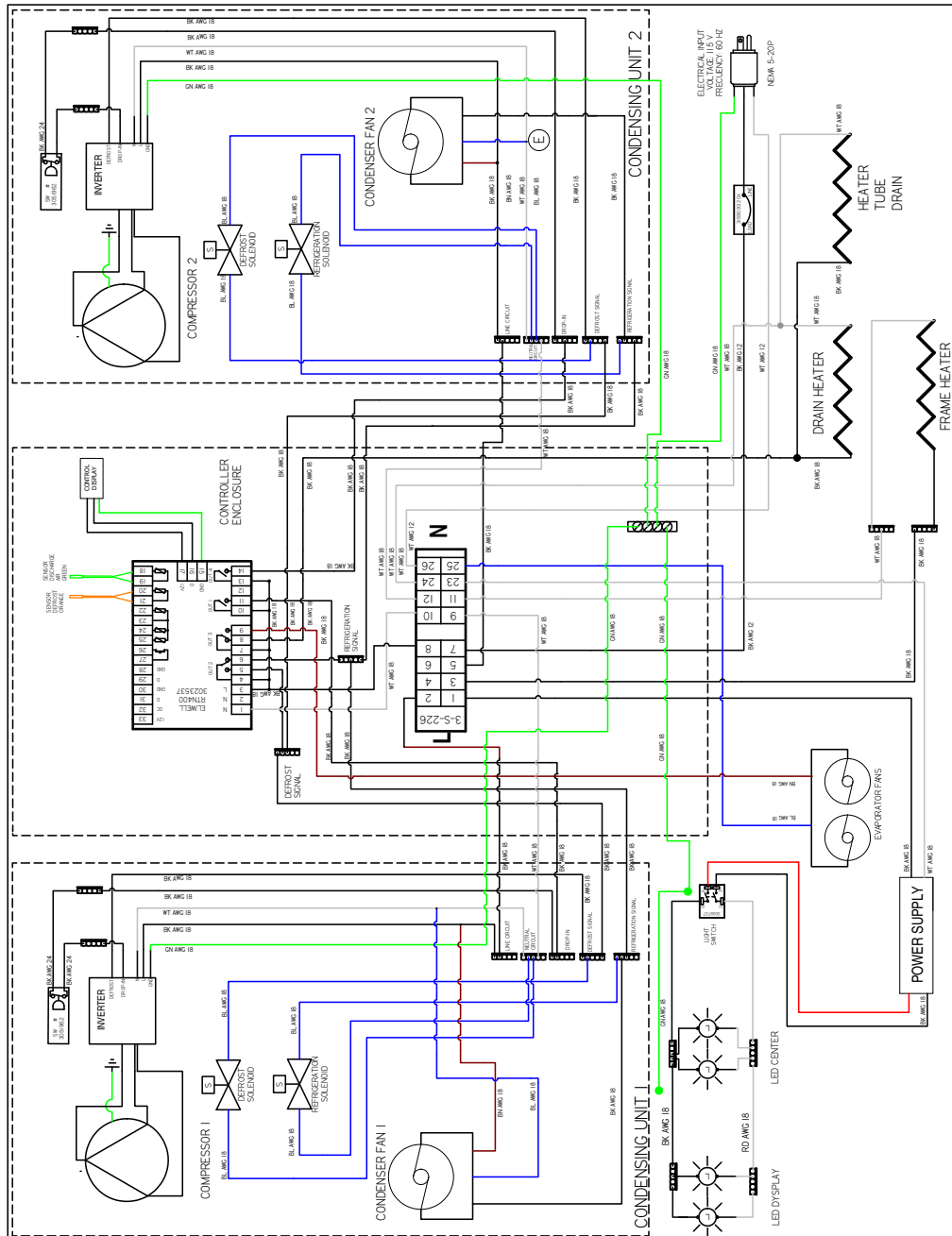
VRL-B1A

Frozen Food

Wiring Diagram

3 Door

3150586_E



FACTORY 14GA WIRE

FACTORY 10GA WIRE

FIELD WIRE

UL COLOR CODES / ABBREVIATIONS

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

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 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



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

Parts may also be ordered at:

parts.husmann.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

Revision G: February 2025: Updated depth dimensions