

# HUSSMANN®

# microSC™

## VRL-B1A

120 V

Frozen Food

Air-Cooled

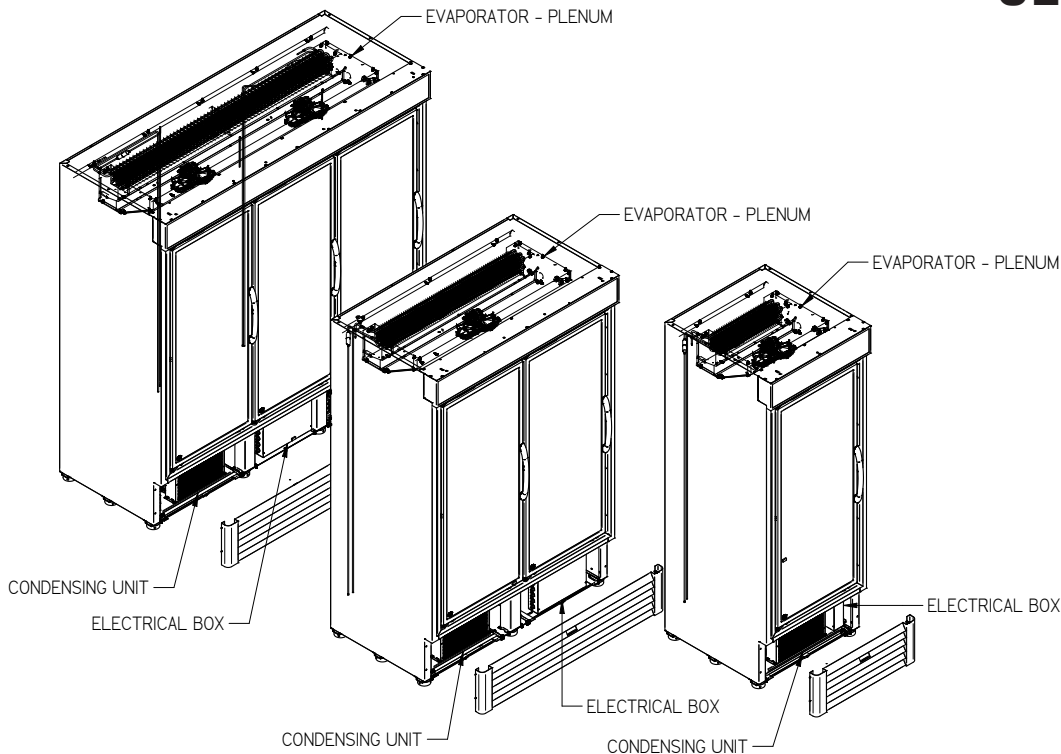
R-290

Merchandise Data Sheet

**P/N 3155543\_E**

**UL EPH® Certified**

**August 2023**



**DOE 2017**  
Energy Efficiency  
Compliant



Portion of parts removed for clarity.

**This product is certified for NSF Type II ambient applications (80°F / 55% RH).**

### UL EPH Certification

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

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Data sheet-VRL-B1A

**⚠ 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 <sup>1\*\*</sup>

		Frozen Food		
		1 Door	2 Door	3 Door
Refrigeration	Discharge Air °F (°C) <sup>1</sup>	-10 to 0 (-23 to -18)	-7 to 2 (-21 to -16)	-10 to 0 (-23 to -18)
	Average Evaporator °F (°C) <sup>2</sup>	-20 to 3 (-29 to 16)	-15 to 5 (-26 to -15)	-20 to 3 (-29 to 16)
	Total Heat of Rejection <sup>3</sup>	1672	3341	6682
Condensing Unit	System Cooling Capacity <sup>4</sup>	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 Data<sup>5</sup> DEC (kWH/day)

1 Door	2 Door	3 Door
6.3	10.71	14.6

<sup>5</sup> 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

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

### Product Data

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

<sup>6</sup> 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).

<sup>7</sup> Computed using AHRI 1200 standard methodology : Total Display Area ft<sup>2</sup> ( m<sup>2</sup>).

<sup>8</sup> 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



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

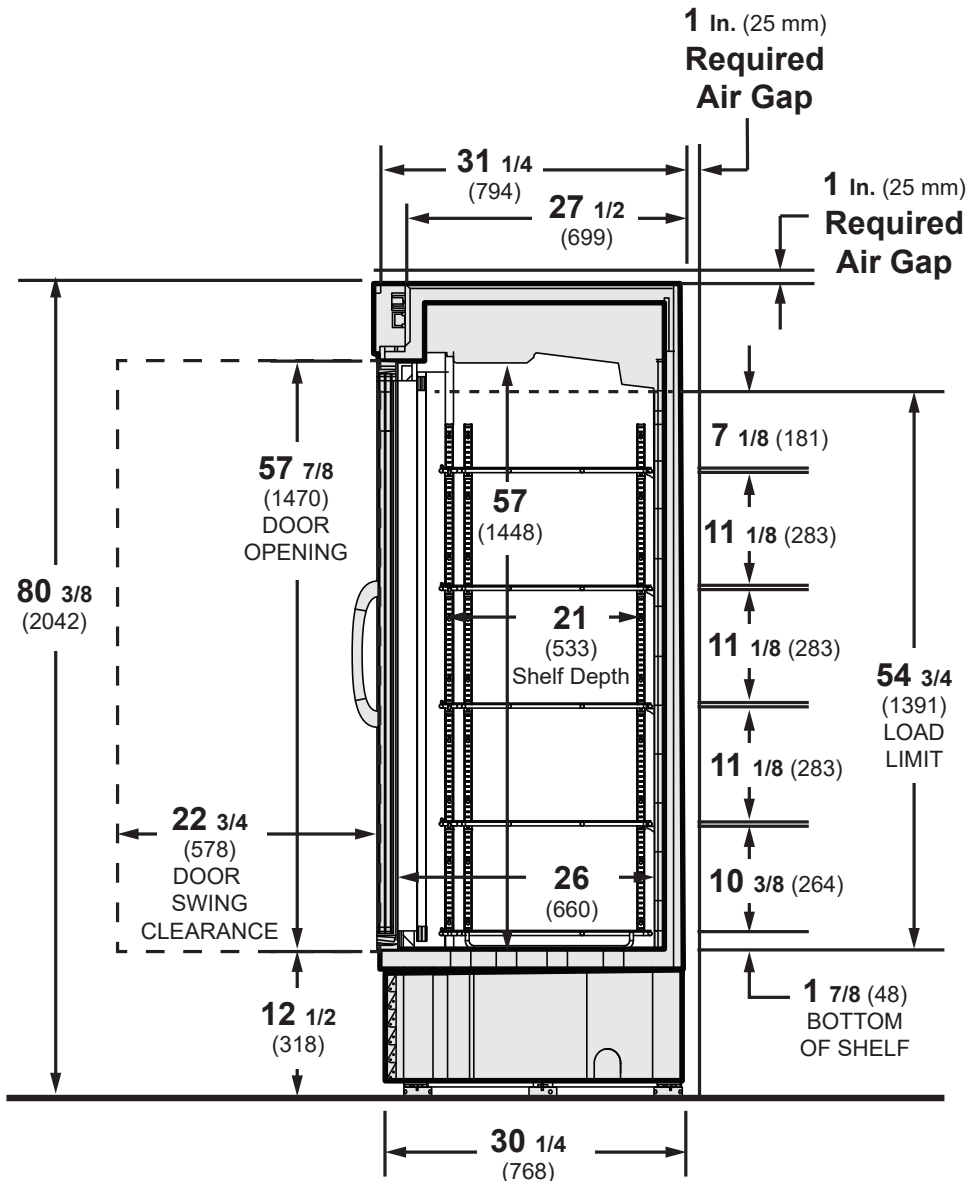
**Clearance Required**

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.

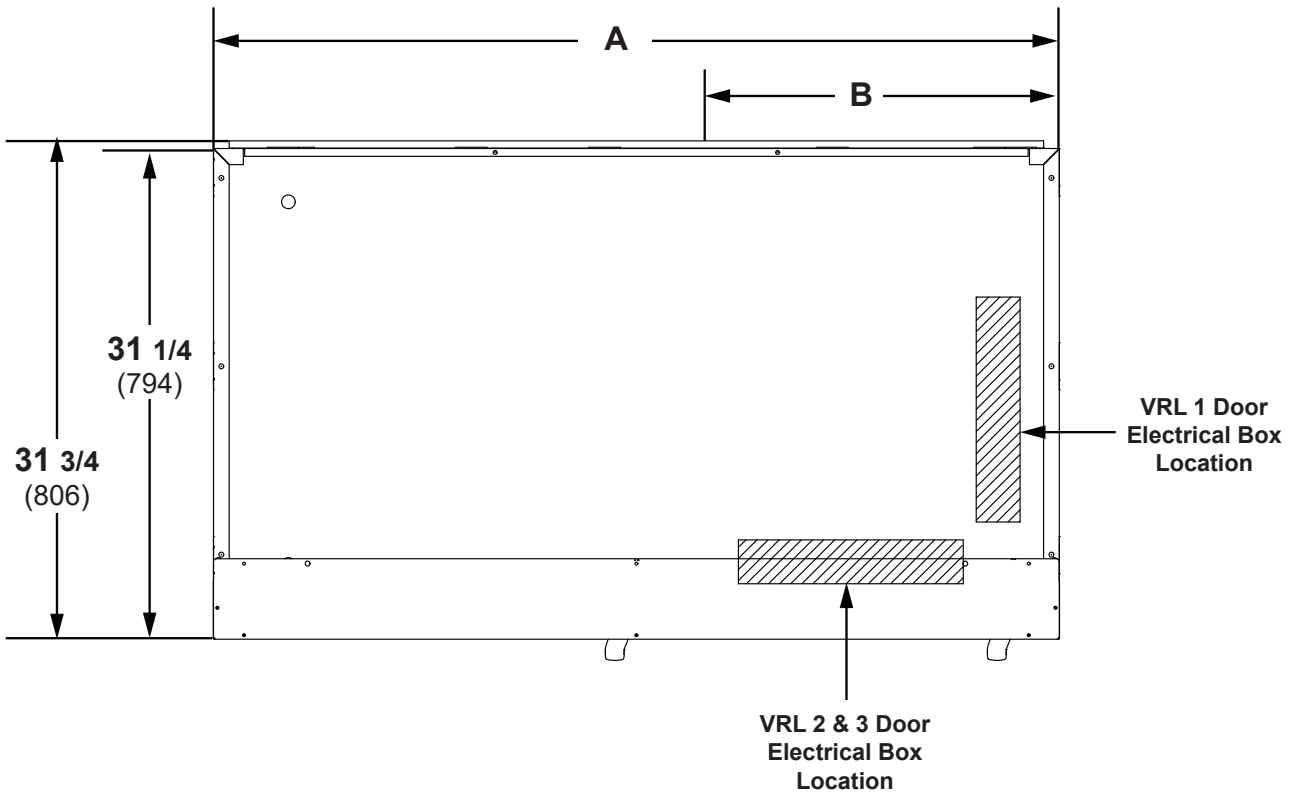


**NOTE:**  
Shelf width is  
24 3/4 in. (629 mm).

**VRL-B1A**  
Frozen Food

**Engineering**  
**Plan Views**

Dimensions shown as in. and (mm).

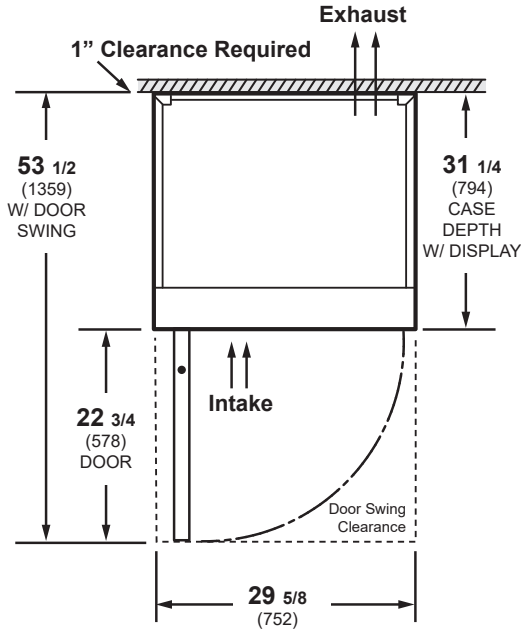


General Dimensions	1 Door	2 Door	3 Door
	(A) Case Length	29 <sup>5</sup> / <sub>8</sub> (752)	54 (1372)
(B) Power Cord Outlet	14 <sup>3</sup> / <sub>4</sub> (375)	2 <sup>3</sup> / <sub>4</sub> (70)	2 <sup>3</sup> / <sub>4</sub> (70)
(C) Electrical Box	Right	Right	Center

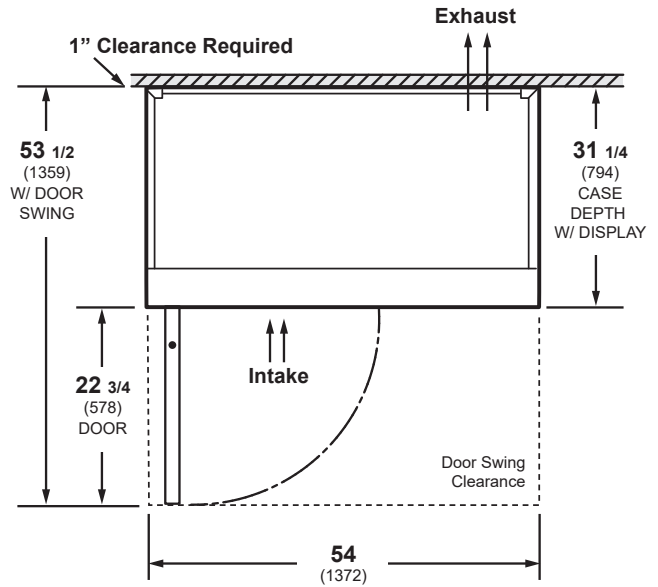
# Engineering Plan Views

# VRL-B1A Frozen Food

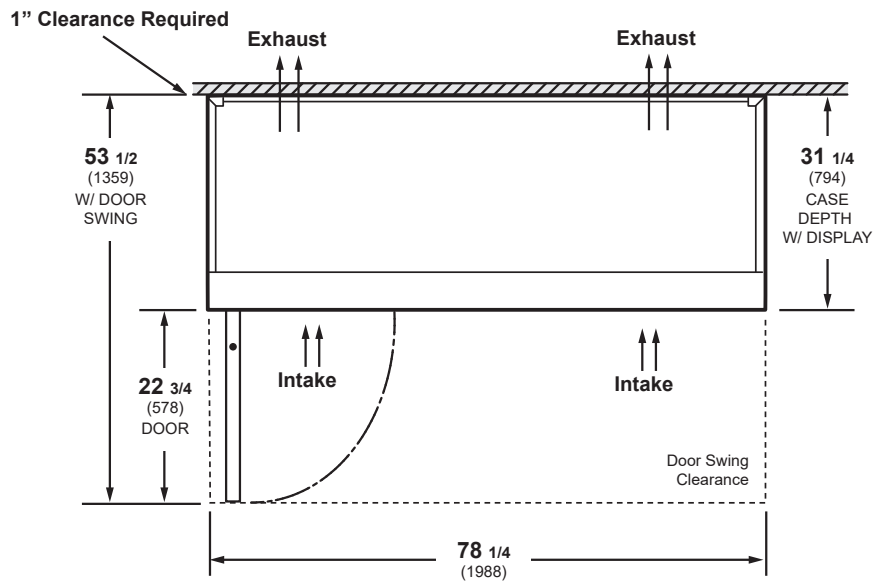
Dimensions shown as in. and (mm).



**VRL 1 Door**



**VRL 2 Door**

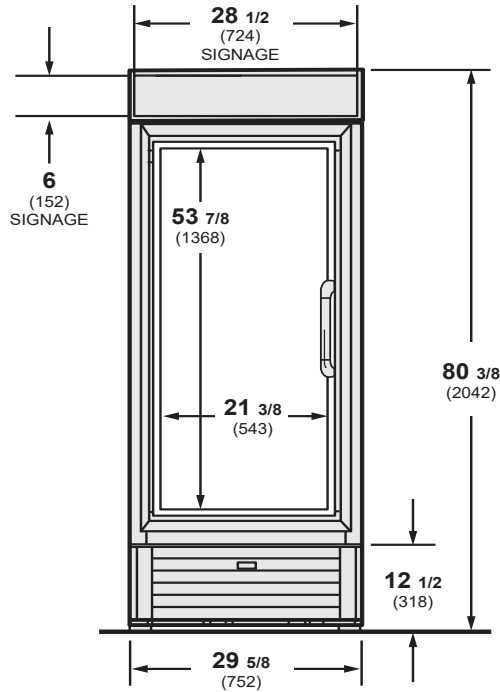


**VRL 3 Door**

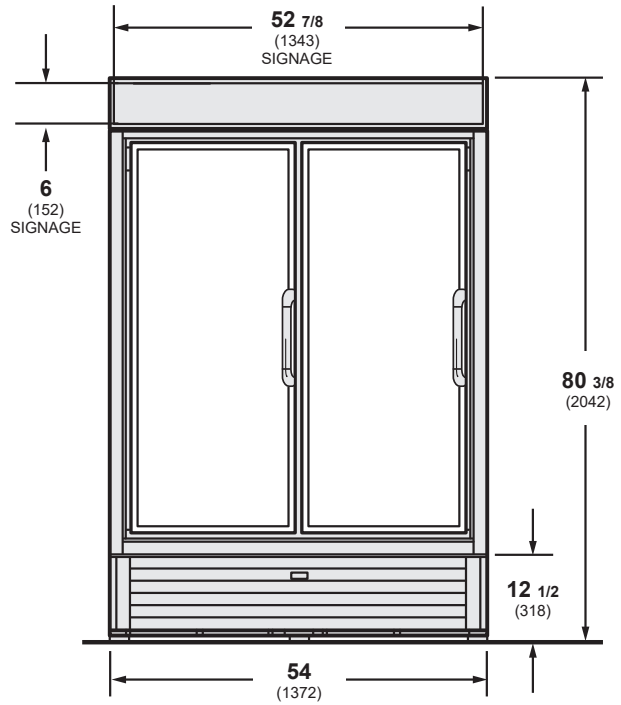
**VRL-B1A**  
Frozen Food

**Engineering**  
**Front Views**

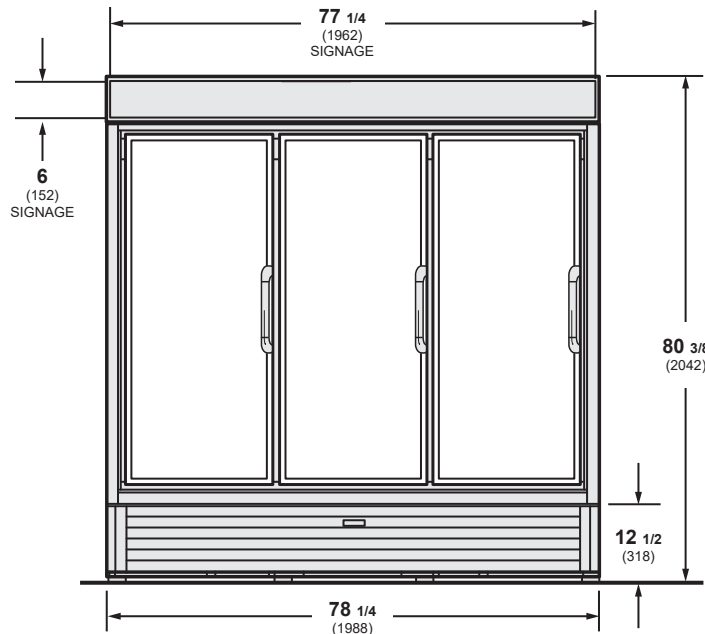
Note: The visible area per door is 8 ft<sup>2</sup> (1152 in<sup>2</sup>).



**VRL 1**  
**Door**



**VRL 2**  
**Door**



**VRL 3**  
**Door**

**VRL-B1A**  
Frozen Food

**Electrical Data**

	<b>1 Dr</b>	<b>2 Dr</b>	<b>3 Dr</b>
<b>Merchandiser Requirements</b>			
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)

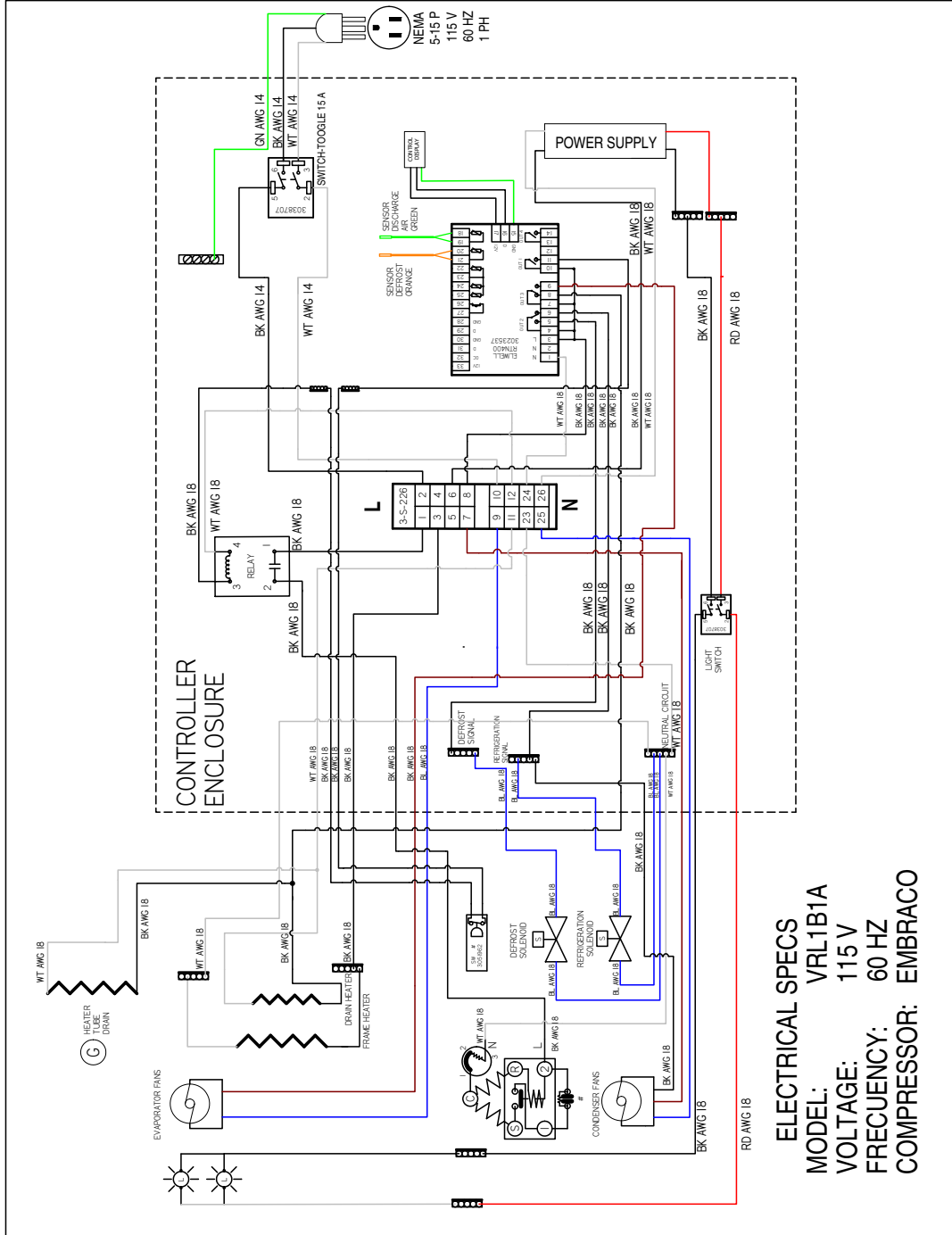
<b>ESTIMATED SHIPPING WEIGHT †</b>			
<b>Case</b>	<b>1 Door</b>	<b>2 Door</b>	<b>3 Door</b>
<b>lb (kg)</b>	362 (164.2)	631 (286)	877 (398)
† Actual weights will vary according to optional kits included.			

# VRL-B1A

Frozen Food

# Wiring Diagram

## 1 Door



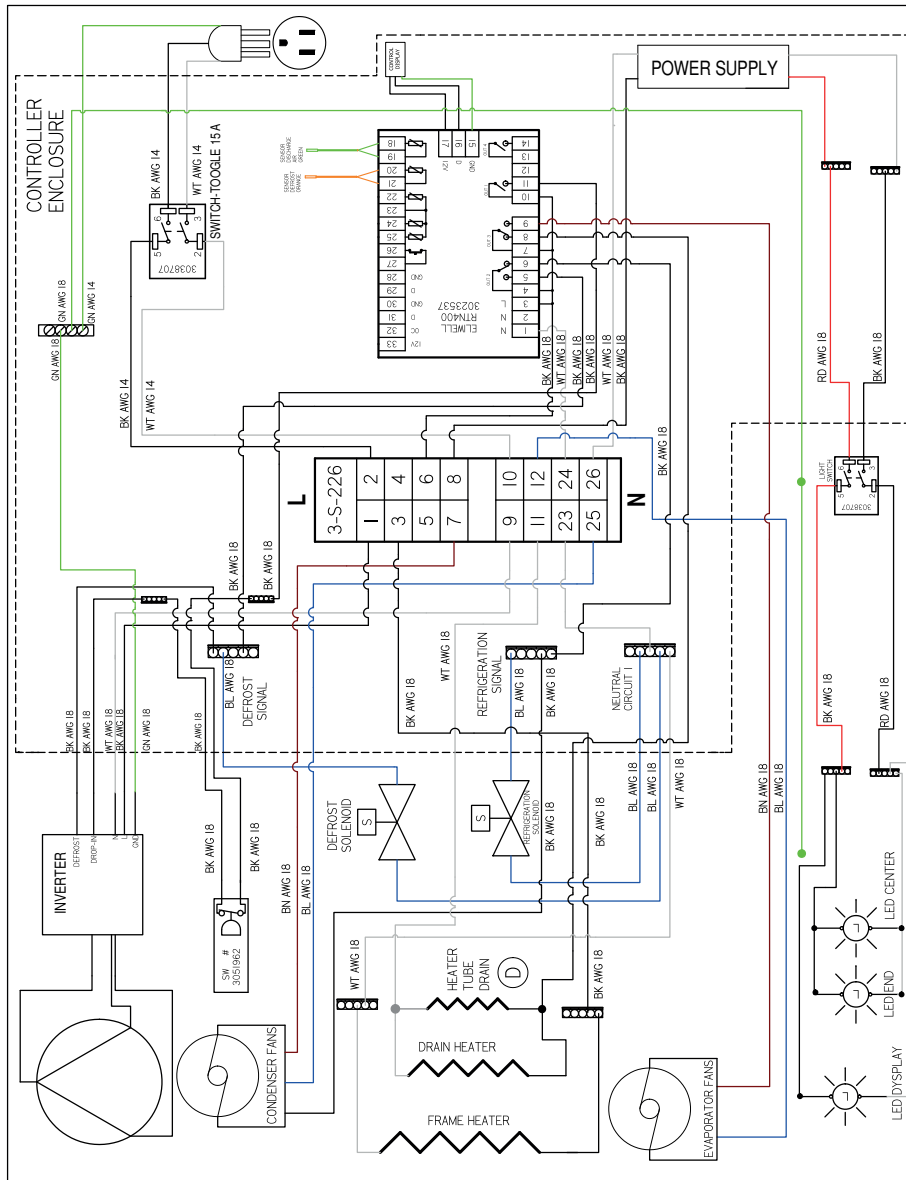
**3145616\_G**

- 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



# 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
  4. REF NONE
  5. UNITS OF MEASUREMENT IN INCHES
  6. BLACK AND WHITE PRINT

3147478\_D

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

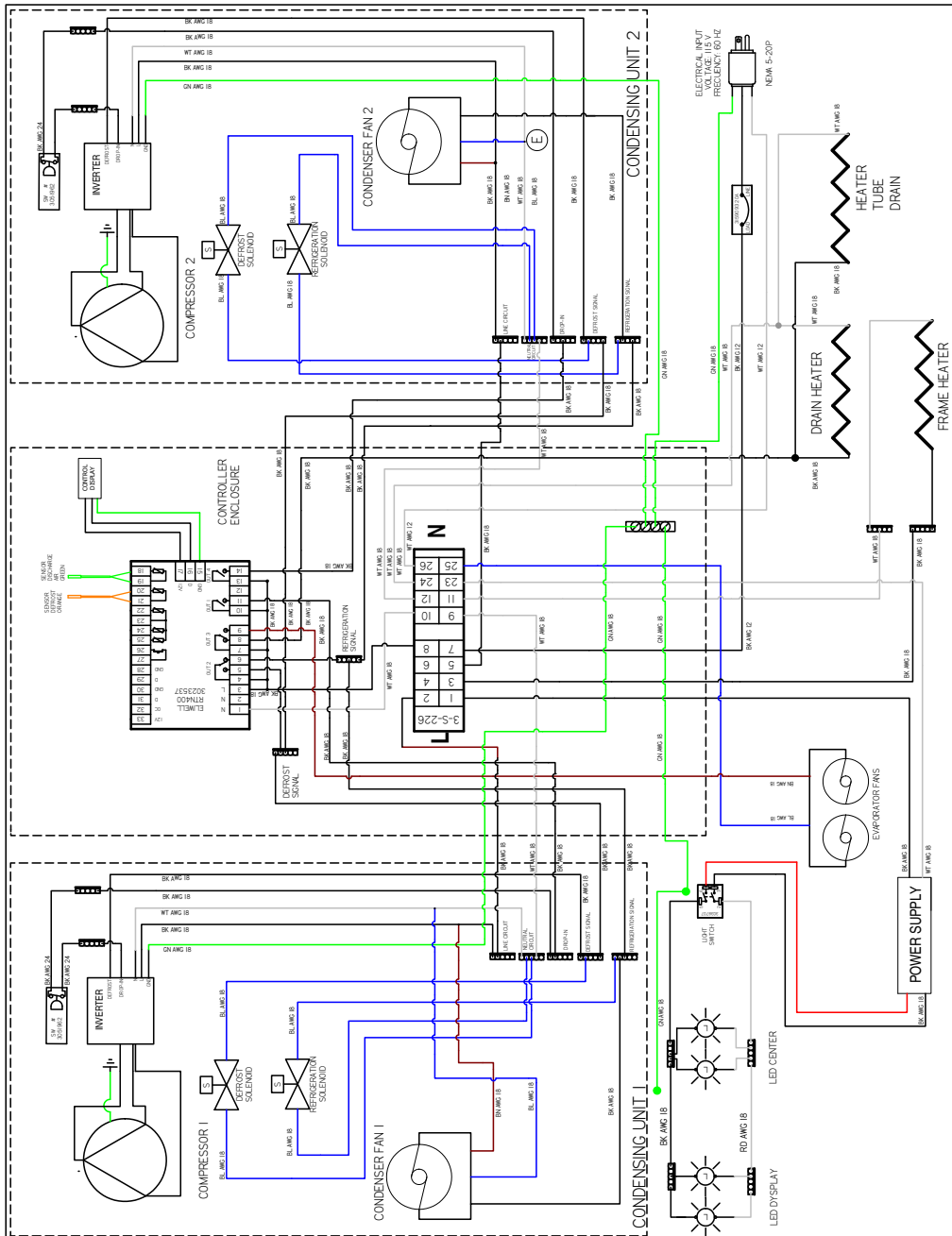
# VRL-B1A

## 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

- NOTES:
1. APPLICABLE STANDARDS / SPECIFICATIONS  
ASME Y14.5M-1994; DIMENSIONS AND TOLERANCES IDENTIFIED WITH SYMBOL
  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**

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## 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.