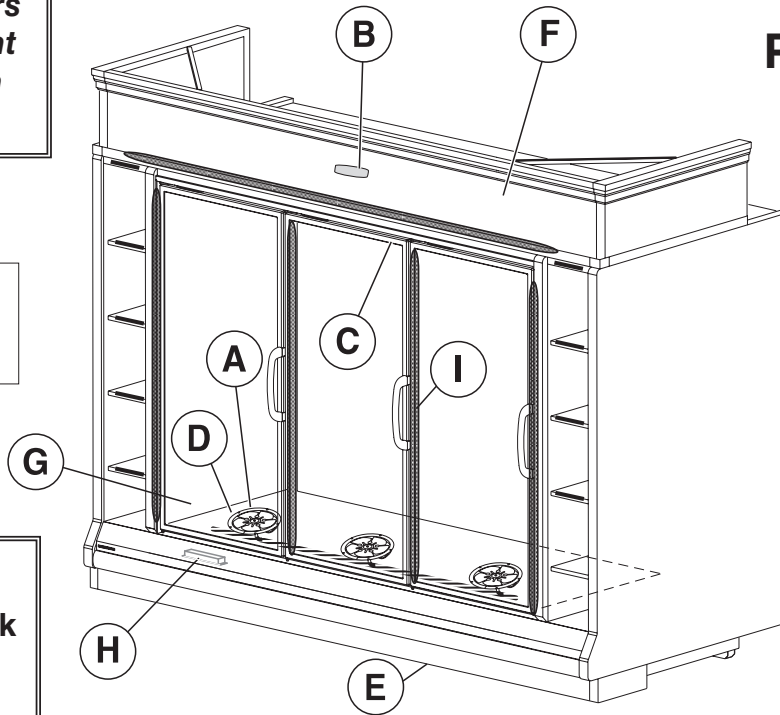


Freedom Line merchandisers are top mount refrigeration ready

OPTIONS SHOWN:
• Lighted Facades

**Warning:
Terminal block NOT for case-to-case wire connection!**



**DOE 2017
Energy Efficiency
Compliant**

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.

| Item | Part # | Description | Wiring Item # | Item | Part # | Description | Wiring Item # |
|--|--|--|---------------|--------------------------------------|--|--|---------------|
| FAN ASSEMBLIES, AND THERMOSTATS | | | | LED FIXTURES AND POWER SUPPLY | | | |
| A. | 12W Standard Energy Efficient Fan Assembly 0477655 0461805 | Fan Motor, Evaporator Fan Blade | (1) | H. | 0499399 | Power Supply | (7) |
| CONTROL PANEL | | | | I. | Door Lamp, LED BU.4440877 BU.4440878 | 4100K Center 4100K End | (8) (9) |
| B. | 3007826 | Dixell XR75 Control | (2) | J. | Facade Lamp, LED BU.4441411 BU.4441412 | 2900K 29.5 In. Length 2900K 30.5 In. Length | (10) |
| C. | 0334802 | Dixell Discharge Air Sensor | (3) | | | | |
| D. | 0334802 | Dixell Defrost Sensor | (4) | | | | |
| REFRIGERATION | | | | | | | |
| E. | 0516897 | Condensate Pump | (5) | | | | |
| F. | 0538255 | Condensate Pan & Heater (Evapoway) | (6) | | | | |
| G. | 0460992 0460993 | TEV 2 Door Models TEV 3-4-5 Door Models | | | | | |

Refer to INNOVATOR REACH-IN GLASS DOOR INSTALLATION AND SERVICE manual, P/N 0425683, for Innovator and Innovator II door and frame replacement parts.

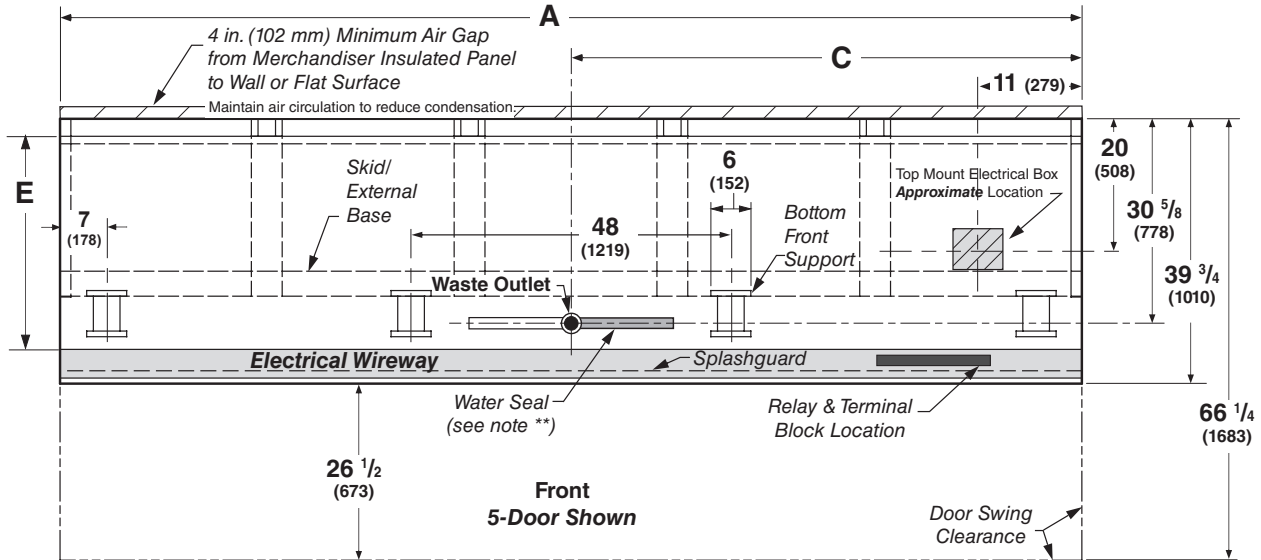
Data sheet-LifeLine RFMN

Note: Revision N: Updated condensing unit refrigerant charges.

| PHYSICAL DATA | |
|---------------------------------|-------|
| Merchandiser Drip Pipe (in.) | 1 1/4 |
| Merchandiser Liquid Line (in.) | 3/8 |
| Merchandiser Suction Line (in.) | 5/8 |

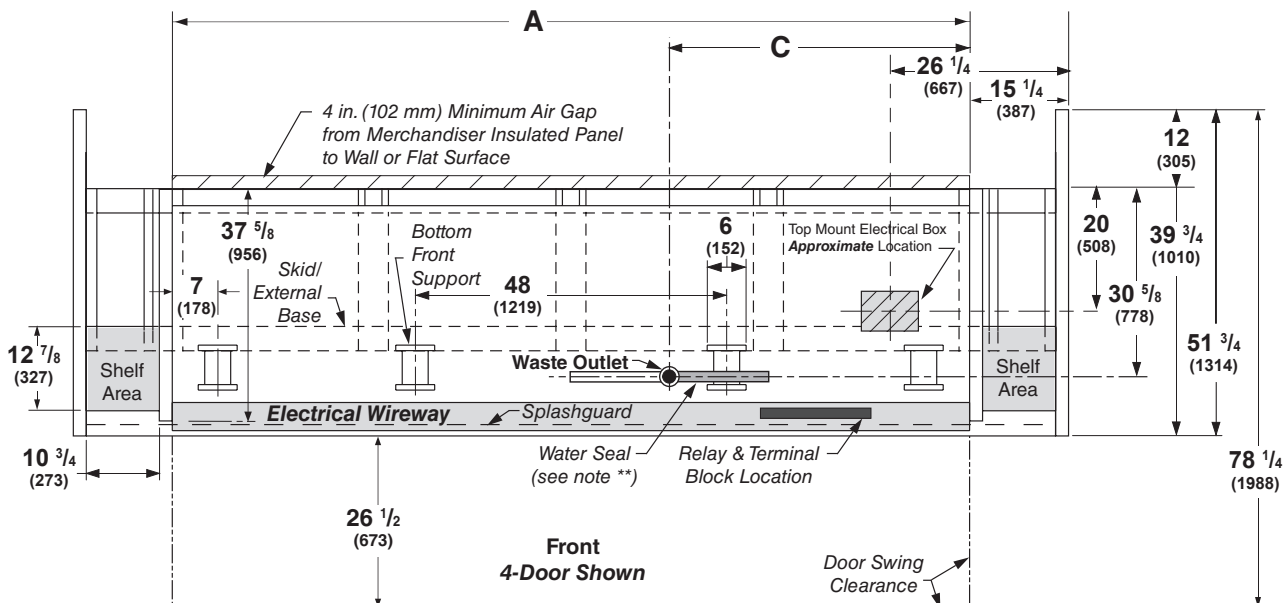
**Freedom Line — Standard
Narrow Footprint Plan View
2, 3, 4 & 5 Door**

Dimensions shown as inches and (mm).



**Freedom Line
Narrow Footprint Plan View
1, 2 & 3 Door**

Dimensions shown as inches and (mm).

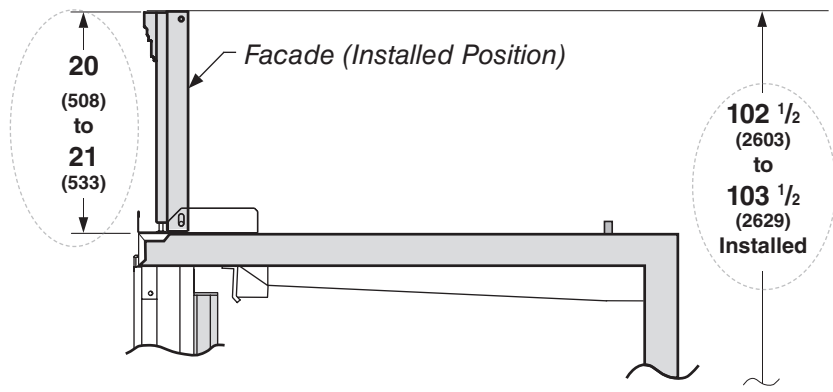


Plan View Dimensions

Freedom Line RFMN
With Innovator Doors
Medium Temperature

| General | 2 Dr | 3 Dr | 4 Dr | 5 Dr |
|---|---------------|----------------------------|----------------|----------------|
| (A) Merchandiser Length | 62 (1575) | 92 1/2 (2350) | 122 7/8 (3121) | 153 3/8 (3896) |
| <i>**NOTE: Each solid end adds approximately 2 3/8 in (60 mm) to length of line up; each partition add approximately 2 3/4 in (70 mm); case to case joints can add approximately 1/8 in (3 mm) for gasket material.</i> | | | | |
| Maximum O/S dimension of merchandiser back to front *** | 39 3/4 (1010) | 39 3/4 (1010) | 39 3/4 (1010) | 39 3/4 (1010) |
| <i>*** Add 26 1/2 in. (673 mm) for door swing.</i> | | | | |
| Back of merchandiser to rear of splashguard | 35 7/8 (911) | 35 7/8 (911) | 35 7/8 (911) | 35 7/8 (911) |
| Width of Skid rail | 3 3/4 (95) | 3 3/4 (95) | 3 3/4 (95) | 3 3/4 (95) |
| Width of Bottom Front Support | 6 (152) | 6 (152) | 6 (152) | 6 (152) |
| Stub-up area between front support and splashguard | 3 1/8 (79) | 3 1/8 (79) | 3 1/8 (79) | 3 1/8 (79) |
| Electrical Service <i>(dimensions are approximate)</i> | | | | |
| (B) RH end of merchandiser to center of Electrical Service Area | 11 (279) | 11 (279) | 11 (279) | 11 (279) |
| Back O/S of merchandiser to center of Electrical Service Area | 20 (508) | 20 (508) | 20 (508) | 20 (508) |
| <i>* NOTE: Electrical Field Wiring Connection Point is at top of merchandiser.</i> | | | | |
| Waste Outlet | | | | |
| (C) Right end of merchandiser to center of waste outlet | 23 7/8 (606) | 54 1/4 (1378) | 46 1/4 (1175) | 76 5/8 (1946) |
| Water Seal | | | | |
| Edge of water seal to center of waste outlet | 13 (330) | 13 (330) | 13 (330) | 13 (330) |
| Schedule 40 PVC drip pipe | 1 1/4 (32) | 1 1/4 (32) | 1 1/4 (32) | 1 1/4 (32) |
| <i>** NOTE: Field installed water seal outlets, tees, and connectors are shipped with merchandiser.</i> | | | | |
| Refrigeration Outlet | | | | |
| (D) RH end of merchandiser to center of refrigeration interface | | | | |
| Back O/S of merchandiser to center of refrigeration interface | | | | |
| <i>* NOTE: Refrigeration interface is at top of merchandiser.</i> | | | | |
| Outside bottom front supports from end of merchandiser | 7 (178) | 7 (178) 37 1/2 (952) LH | 7 (178) | 7 (178) |
| Center bottom front support from Centerline | 24 (610) | 24 (610) | 24 (610) | 24 (610) |
| <i>Distance between Center and Outside supports will vary</i> | | | | |
| (E) Depth when disassembled for door entry | 35 1/2 (902) | 35 1/2 (902) | 35 1/2 (902) | 35 1/2 (902) |

Freedom Line RFMN
With Innovator Doors
Medium Temperature



20 in. Straight Facade
Facade in Cross Section

Freedom Line Narrow Footprint Reach-in
Top-Mount-Refrigeration Ready
2, 3, 4 and 5 Door Models

Standard Reach-in configuration consists of Innovator I doors, energy efficient fan motors, and EcoShine II LED vertical lighting.



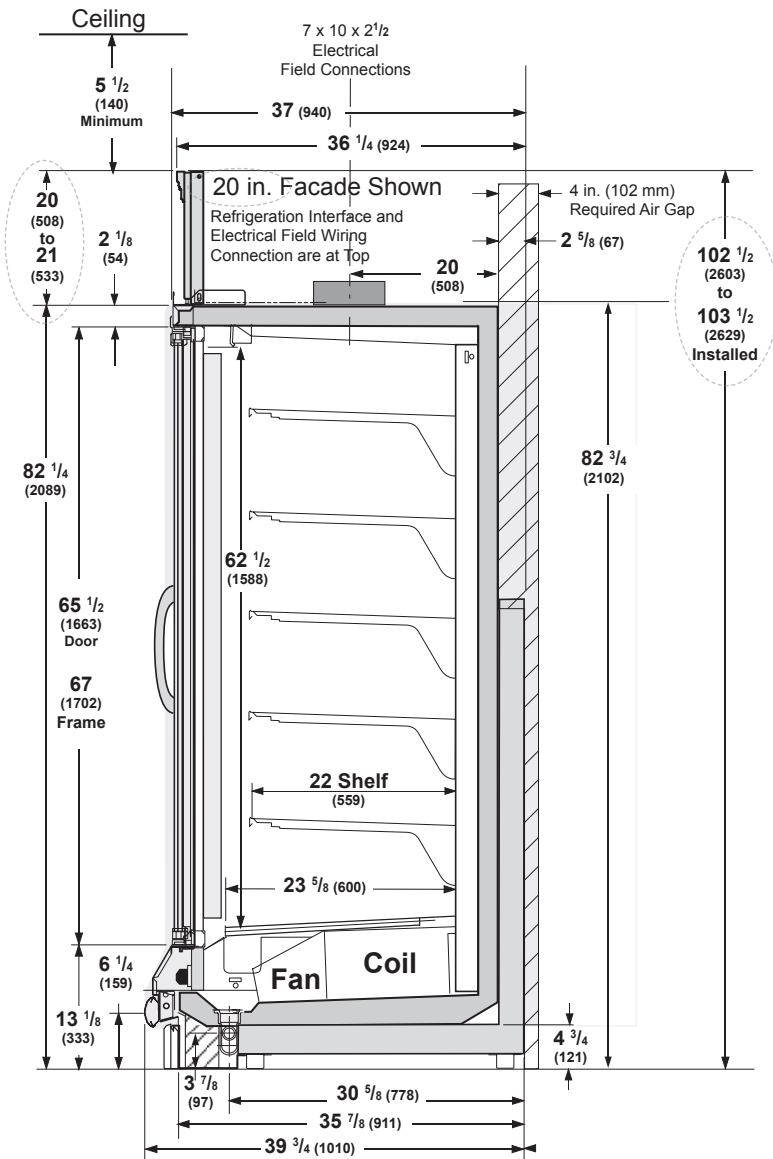
Husmann refrigerated merchandisers configured for sale for use in the United States meet or surpass the requirements of the DOE 2017 energy efficiency standards.

Provide adequate clearance for air circulation at rear to reduce condensation.

Dimensions shown as inches and (mm).

Note: An optional Louvered Facade Panel kit is available that will allow for the top spacing minimum clearance of 3 inches (76 mm).

Note: Facade is field-installed. Electrical connection box, external supports, door handle and front raceway may be removed to facilitate passage through door way.



NSF Certification

This merchandiser model is manufactured to meet NSF/ANSI (National Sanitation Foundation) Standard #7 requirements for construction, materials & cleanability.

Freedom Line RFMN
With Innovator Doors
Medium Temperature

REFRIGERATION DATA

Note: This data is based on store temperature and humidity levels that do not exceed NSF guidelines.

| | MEDIUM TEMP | AHRI Rating |
|------------------|-------------|-------------|
| Discharge Air °F | 32 | 36 |
| Evaporator °F | 27 | 32 |
| Unit Sizing °F | 25 | 30 |

BTU/HR/DOOR

| | NSF TYPE I | NSF TYPE II | AHRI RATING |
|--|------------|-------------|-------------|
|--|------------|-------------|-------------|

Temp (°F) /R.H.75°/55% 80°/55%

INNOVATOR

| | | | |
|--------------|-----|-----|-----|
| Parallel | 480 | 505 | 470 |
| Conventional | 500 | 525 | 490 |

§ Average evaporator temperature shown. Use dew point for high glide refrigerants for unit sizing. Care should be taken to use the dew point in PT tables for measuring and adjusting superheat. Adjust evaporator pressure as needed to maintain discharge air temperature shown.

DEFROST DATA

| | |
|---------------------------|------|
| Frequency (hr) | 24 |
| Defrost Water (lb/Dr/day) | 0.36 |

(± 15% based on case configuration and product loading.)

OFFTIME

| | |
|--------------------|----|
| Temp Term (°F) | 48 |
| Failsafe (minutes) | 40 |

CONVENTIONAL CONTROLS

| | Cut In | Cut Out |
|------------|--------|---------|
| HPC (psig) | 320 | 395 |
| LPC (psig) | 15 | 5 |

Working charge with recommended Condensing Unit installed:

| | | | |
|------------|--------|---------|---------|
| 2Dr | 2.5 lb | 40.0 oz | 1.13 kg |
| 3Dr | 3.4 lb | 54.4 oz | 1.54 kg |
| 4Dr | 4.3 lb | 68.8 oz | 1.95 kg |
| 5Dr | 3.5 lb | 56.0 oz | 1.59 kg |

based on 27°F (-2.8°C) Evaporator temperature for medium temperature applications.

Freedom Line RFMN

With Innovator Doors
Medium Temperature

Hussmann recommends against frame heater cycling with *Innovator doors* or *Innovator III doors* to prevent door seals from freezing to the frames and tearing.

Electrical Data

| | 2Dr | 3Dr | 4Dr | 5Dr | | | | |
|--|---------|------|------|------|-------|------|------|------|
| Number of Fans—12W | 2 | 3 | 4 | 5 | | | | |
| | Amperes | | | | Watts | | | |
| Merchandiser | 2Dr | 3Dr | 4Dr | 5Dr | 2Dr | 3Dr | 4Dr | 5Dr |
| Energy Efficient Evaporator Fan | | | | | | | | |
| 120V 50/60Hz Innovator | 0.60 | 0.90 | 1.20 | 1.50 | 36 | 54 | 72 | 90 |
| Door Anti-sweat Heaters (on fan circuit) | | | | | | | | |
| 120V 50/60Hz Innovator | N/A | | | | | | | |
| Frame Anti-sweat Heaters (on fan circuit) | | | | | | | | |
| 120V 50/60Hz Innovator | 0.39 | 0.59 | 0.79 | 0.99 | 47 | 71 | 94 | 118 |
| Heated Condensate Pan | 5.0 | 5.0 | 5.0 | 5.0 | 600 | 600 | 600 | 600 |
| Condensate Pump | 1.9 | 1.9 | 1.9 | 1.9 | 87 | 87 | 87 | 87 |
| Defrost | | | | | | | | |
| Drain Heaters (120V) | N/A | | | | | | | |
| 120V Circuit | | | | | | | | |
| <i>(Fans, anti-sweat heaters, drain pan heater, condensate pan heater, condensate pump, and standard EcoShine 2 LED's)</i> | | | | | | | | |
| With Innovator Doors (standard) | 8.0 | 8.8 | 9.6 | 10.5 | 813 | 877 | 939 | 1003 |
| Maximum Overcurrent | | | | | | | | |
| Protection Device (MOPD) | 20 | 20 | 20 | 20 | | | | |
| Standard Vertical LED Lighting | 2Dr | 3Dr | 4Dr | 5Dr | 2Dr | 3Dr | 4Dr | 5Dr |
| Hussmann EcoShine II™ - A (120V) | 0.31 | 0.46 | 0.62 | 0.77 | 37.1 | 55.6 | 74.2 | 92.7 |

† Notes:

1. Electrical input for the RFMN Freedom cases require two electrical connections at the top of the case: one 120V connection for the RFMN and one 208/230V or 120V connection for the condensing unit.
2. The condensing unit amps must be used to calculate the total electrical load. Refer to the condensing unit data sheet.

A qualified electrician should perform all wiring in accordance with the NEC code and/or all local codes. Wire sizing must take into account the total distance from the electrical panel to the Freedom case.

| |
|--|
| Freedom Line RFMN With Innovator Doors Medium Temperature |
|--|

Product Data

| | |
|--|---|
| <i>Recommended Usable Cube</i> ¹ (Cu Ft/Dr) | 22.80 ft ³ /Dr (0.65 m ³ /Dr) |
| <i>AHRI Total Display Area</i> ² (Sq Ft/Dr) | 13.04 ft ² /Dr (1.21 m ² /Dr) |
| <i>Shelf Area</i> ³ (Sq Ft/Dr) | 28.50 ft ² /Dr (2.65 m ² /Dr) |

¹ AHRI Refrigerated Volume less shelving and other unusable space: Refrigerated Volume/Unit of Length, ft³/ft [m³/m]
² Computed using AHRI 1200 standard methodology: Total Display Area, ft² [m²]/Unit of Length, ft [m]
³ Shelf surface area is composed of bottom deck plus standard shelf complement, as shown in the Hussmann *Product Reference Guide*. The standard shelf complement for this model is (5) rows of 22-inch shelves.

| ESTIMATED SHIPPING WEIGHT ⁴ | | | | | |
|---|-------------|-------------|-------------|-------------|-------------------------|
| | <i>2 Dr</i> | <i>3 Dr</i> | <i>4 Dr</i> | <i>5 Dr</i> | Solid End (each) |
| Standard Freedom Line Merchandiser (18-Inch Facade, no Arch) | | | | | |
| lb (kg) | 1005 (456) | 1262 (572) | 1688 (766) | 2070 (939) | 74 (34) |

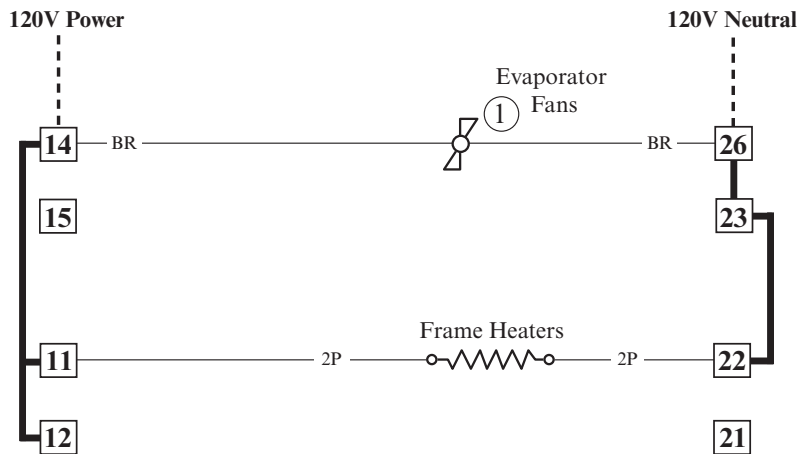
⁴ Actual weights will vary according to optional kits included.

Freedom Line RFMN

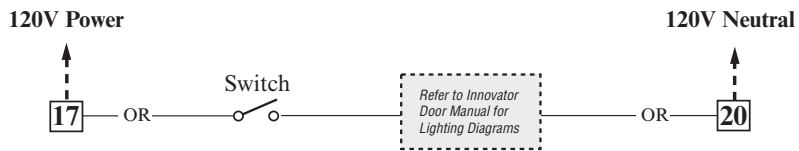
With Innovator Doors
Medium Temperature

Fan and Heater Circuits – Offtime Defrost (Standard) Medium Temperature

CIRCLED NUMBERS = PARTS LIST ITEM NUMBERS
 R = Red P = Purple 2P = Purple (2 Bands) DB = Dark Blue BK = Black
 LB = Light Blue Pink = Pink BR = Brown Y = Yellow OR = Orange W = White
THESE ARE MARKER COLORS (WIRE MAY VARY).

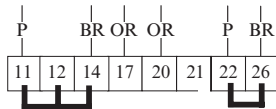


Refer to *Innovator Reach-In Glass Door, Installation and Service manual*, P/N 0425683, for *Innovator* door and frame replacement parts.



Terminal Blocks in Wireway

Medium Temperature
with
Offtime Defrost

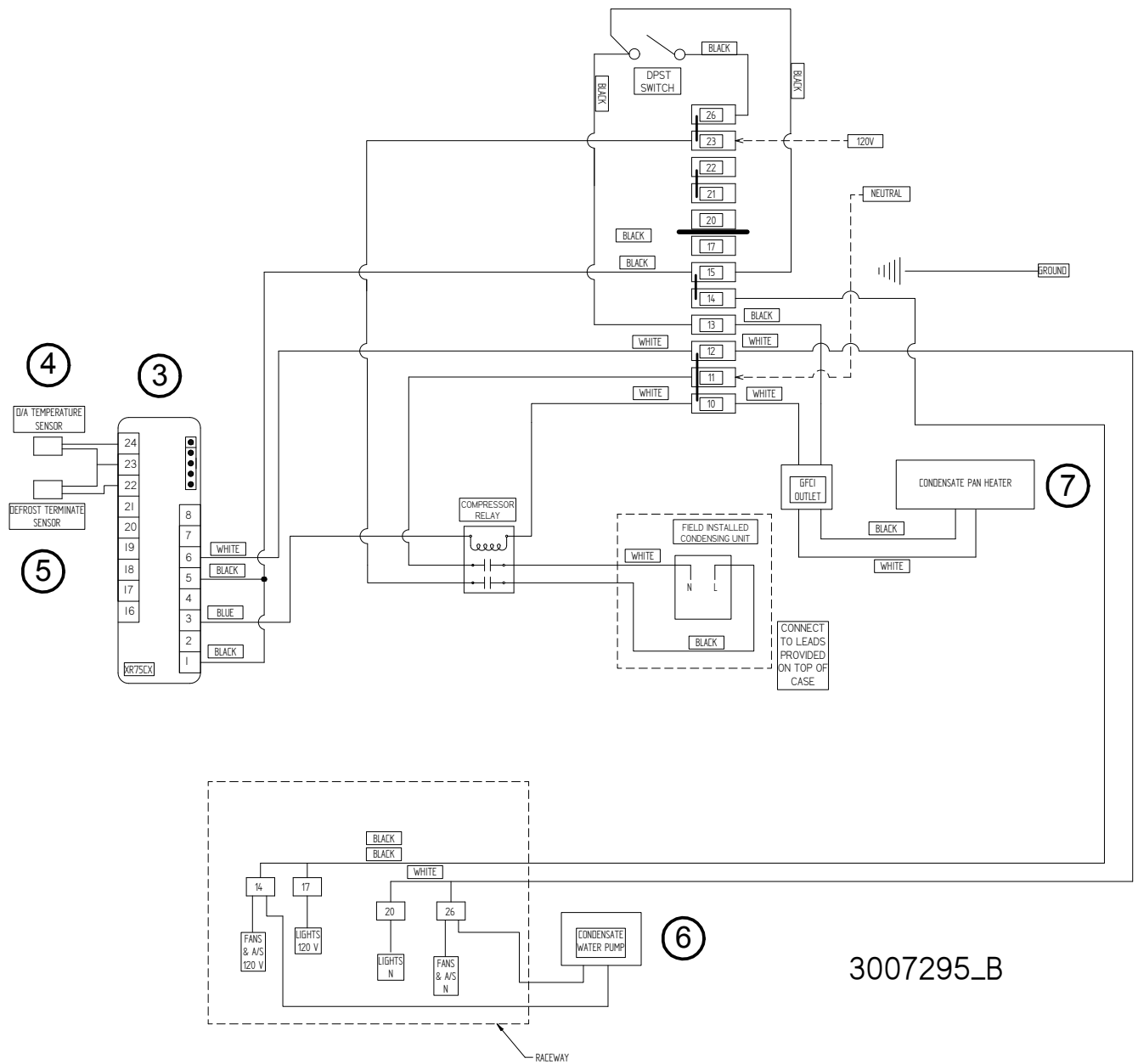


WARNING

All components must have mechanical ground, and the merchandiser must be grounded.

● = 120V Power ○ = 120V Neutral ⊥ = Field Ground *m̄m* = Case Ground

Freedom Line RFMN
With Innovator Doors or Innovator III Doors
Medium Temperature

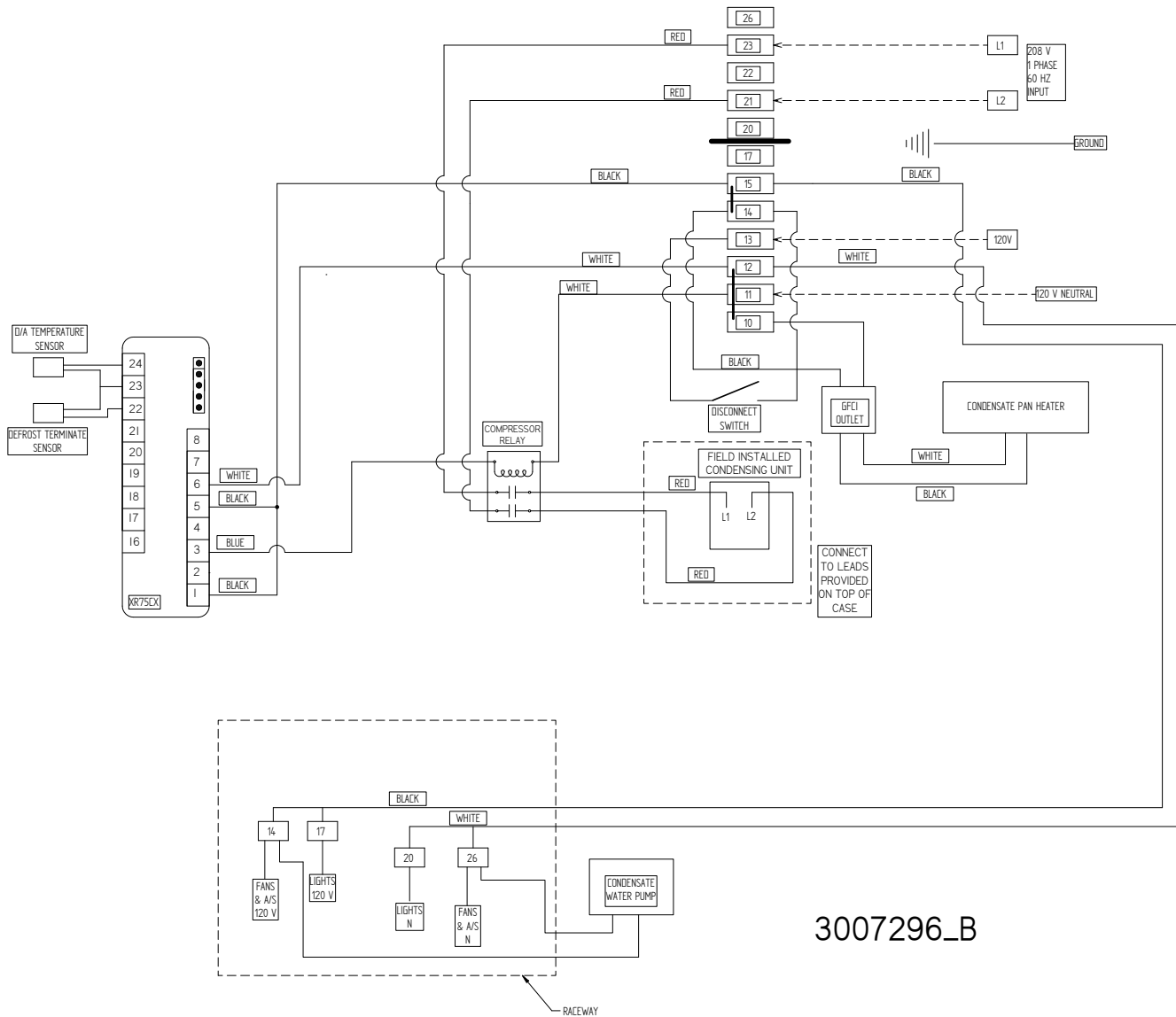


3007295_B

Dixell Wiring Diagram — Medium Temperature Reach-in with 2 or 3 Doors

Freedom Line RFMN

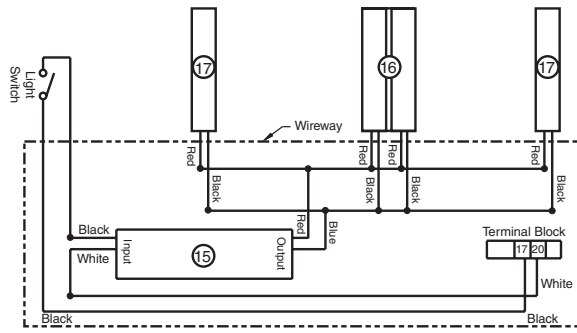
With Innovator Doors
Medium Temperature



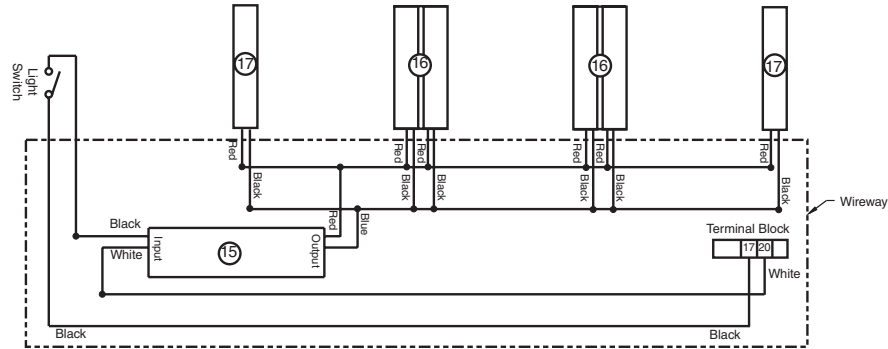
Dixell Wiring Diagram — Medium Temperature Reach-in with 4 or 5 Doors

**Optional
Lighting
LED
Fixtures
Husmann
EcoShine™**

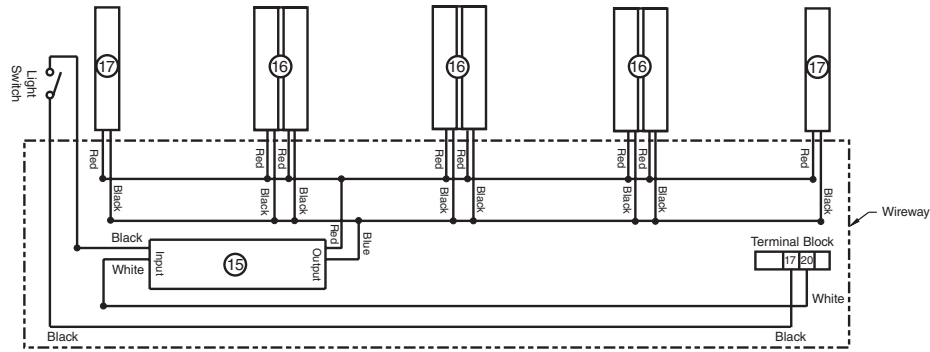
Freedom Line RFMN
With Innovator Doors
Medium Temperature



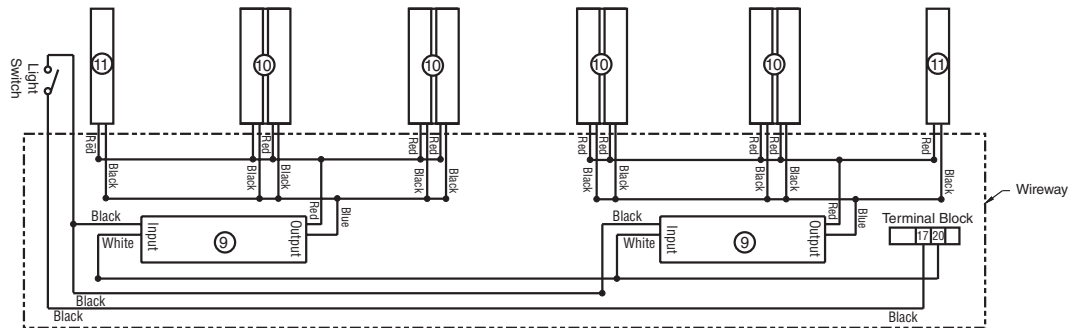
2 Door LED Light Wiring Diagram



3 Door LED Light Wiring Diagram



4 Door LED Light Wiring Diagram



5 Door LED Light Wiring Diagram

WARNING

All components must have mechanical ground, and the merchandiser must be grounded.

Circled numbers = Parts List Item Numbers

R= Red Y= Yellow G= Green BL= Blue BK= Black W= White

● = 120V Power ○ = 120V Neutral ⊥ = Field Ground ≡ = Case Ground